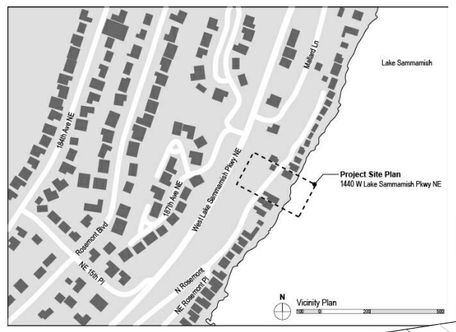


LEGAL DESCRIPTION

Lots 35 and 36, Rosemont Beach, According to the plat thereof recorded in 34 of plats, page 28, records of King County, Washington

EXISTING IMPERVIOUS SURFACES

NAME	AREA
Sheds	395 SF
House	1519 SF
Stairs and Bulkhead	124 SF
Driveway	1165 SF
TOTAL	3203 SF

COORDINATION SET - GROSS AREAS

NAME	AREA
Conditioned Space	3963 SF
Crawlspace	1655 SF
Decks and Terraces	1192 SF
On-grade Decks	436 SF
Pool	752 SF
Unconditioned Space	2089 SF
	10087 SF

NEIGHBOR
APN # 7430500175
1444 W Lake Sammamish Pkwy NE

PROJECT SITE
APN # 7430500180
1440 W Lake Sammamish Pkwy NE

NEIGHBOR
APN # 7430500190
1430 W Lake Sammamish Pkwy NE

NORTH PROPERTY LINE
SOUTH PROPERTY LINE
WEST PROPERTY LINE = 90.85'
Side Yard Setback 7'-6"
Steep slope
Steep Slope Setback 50'-0"
Main entrance
Garage entrance
New 680 SF driveway
Lap pool
NE ROSEMONT PL
Edge of asphalt
Gas line
High voltage line
R.O.W. Centerline
Water line
Side Sewer Line
Wetland Boundary
OHWM per LUC 20.25E.050.B.2
Lake water line (11/20/19, 11AM)
Existing 150 SF shed with concrete slab to be removed
New boulder retaining wall per landscape plan
Log steps to beach area per landscape plan
Conc. pavers per landscape plan
New conc. stairs per landscape plan
North edge of dock aligned with north edge of stairs
Electrical outlet and hose bib
Covered boat lift
Jetski lift
New 455 SF dock
Sanitary Sewer Easement
Side Sewer Easement
On-grade steps per landscape plan
Existing 84 SF shed to be removed
Existing 150 SF shed to be removed
LAKE SAMMAMISH

EXISTING TREE DESCRIPTIONS

ID#	Tree Description	DBH (in)	Drip (ft)	Status
5916	Cedar, Western Red (Thuja plicata)	31	15' - 0"	Remain
5917	Cedar, Western Red (Thuja plicata)	18	12' - 0"	Remain
5918	Cedar, Western Red (Thuja plicata)	25	12' - 0"	Remain
5919	Cedar, Western Red (Thuja plicata)	17	11' - 0"	Remove
5922	Cherry, SPP (Prunus spp.)	18	14' - 0"	Remove
5923	Douglas Fir (Pseudotsuga menziesii)	10	8' - 0"	Remove
5928	Bigleaf Maple (Acer macrophyllum)	62	15' - 0"	Remove
5929	Douglas Fir (Pseudotsuga menziesii)	22	13' - 0"	Remove
5930	Cedar, Western Red (Thuja plicata)	12	9' - 0"	Remove
5931	Cedar, Western Red (Thuja plicata)	27	15' - 0"	Remove
5933	Mulberry, SPP (Morus spp.)	17	9' - 0"	Remove
5934	Cedar, Western Red (Thuja plicata)	9	7' - 0"	Remove
5936	Bigleaf Maple (Acer macrophyllum)	38	21' - 0"	Remove
5938	Bigleaf Maple (Acer macrophyllum)	18	10' - 0"	Remove
5940	Cedar, Western Red (Thuja plicata)	17	10' - 0"	Remain
5941	Douglas Fir (Pseudotsuga menziesii)	15	15' - 0"	Remain
5942	Bigleaf Maple (Acer macrophyllum)	13	10' - 0"	Remain
5943	Bigleaf Maple (Acer macrophyllum)	25, 24, 12	18' - 0"	Remain
5944	Bigleaf Maple (Acer macrophyllum)	55	20' - 0"	Remain
5945	Bigleaf Maple (Acer macrophyllum)	28	18' - 0"	Remain
5992	Cedar, Western Red (Thuja plicata)	13	12' - 0"	Remain
5993	Bigleaf Maple (Acer macrophyllum)	10	14' - 0"	Remain
5994	Cedar, Western Red (Thuja plicata)	19	20' - 0"	Remain

Site Plan - Coordination Set

Drawing Issues:

No.	Phase	Date

Owner:

Mike Neil
8002 Avalon Pl
Mercer Island, WA 98040

v 425.503.4068

Architect:

Build llc
Andrew van Leeuwen 5512 1st Ave NE
Seattle WA 98105

v 206.940.4314 f 206.382.4111

8413 REGISTERED ARCHITECT
ANDREW M. van LEEUWEN
STATE OF WASHINGTON

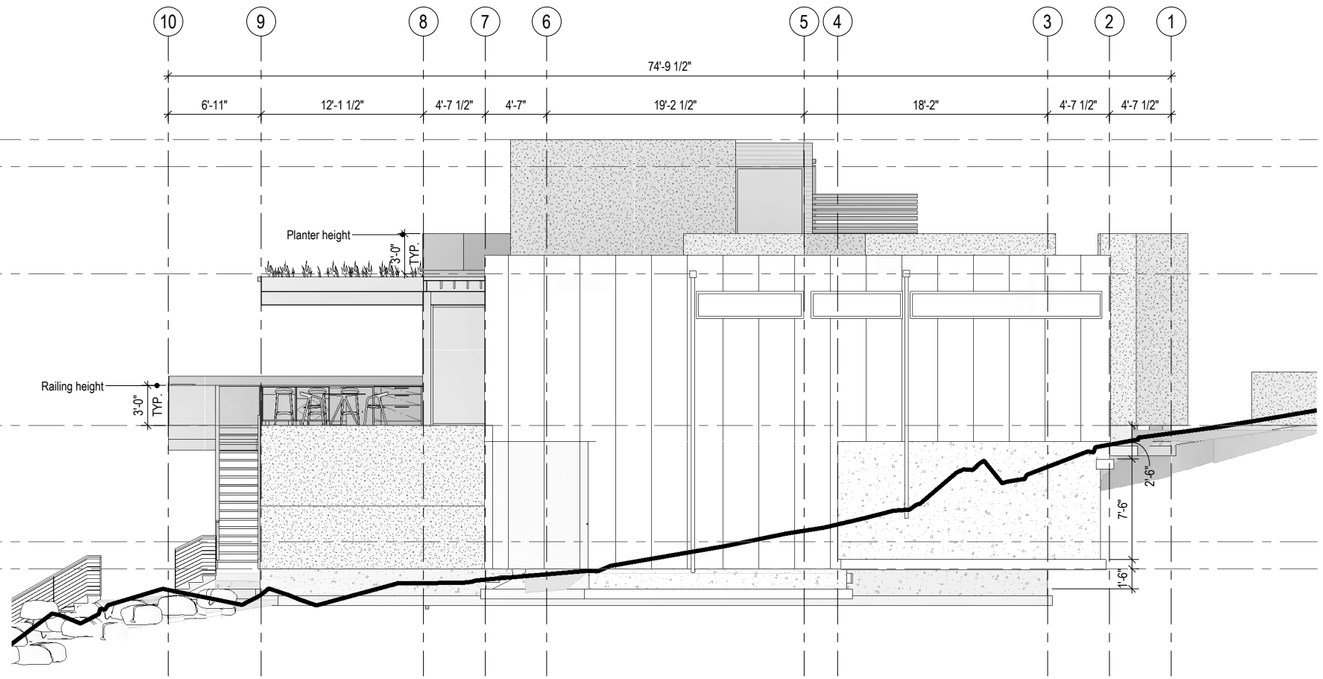
NEIL RESIDENCE

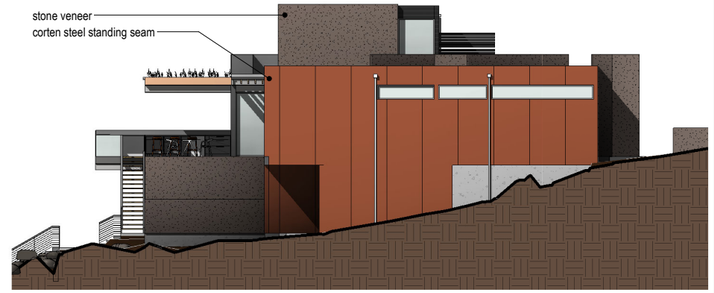
1440 W Lake Sam. Pkwy NE
Bellevue, WA 98008

SITE PLAN - COORDINATION SET

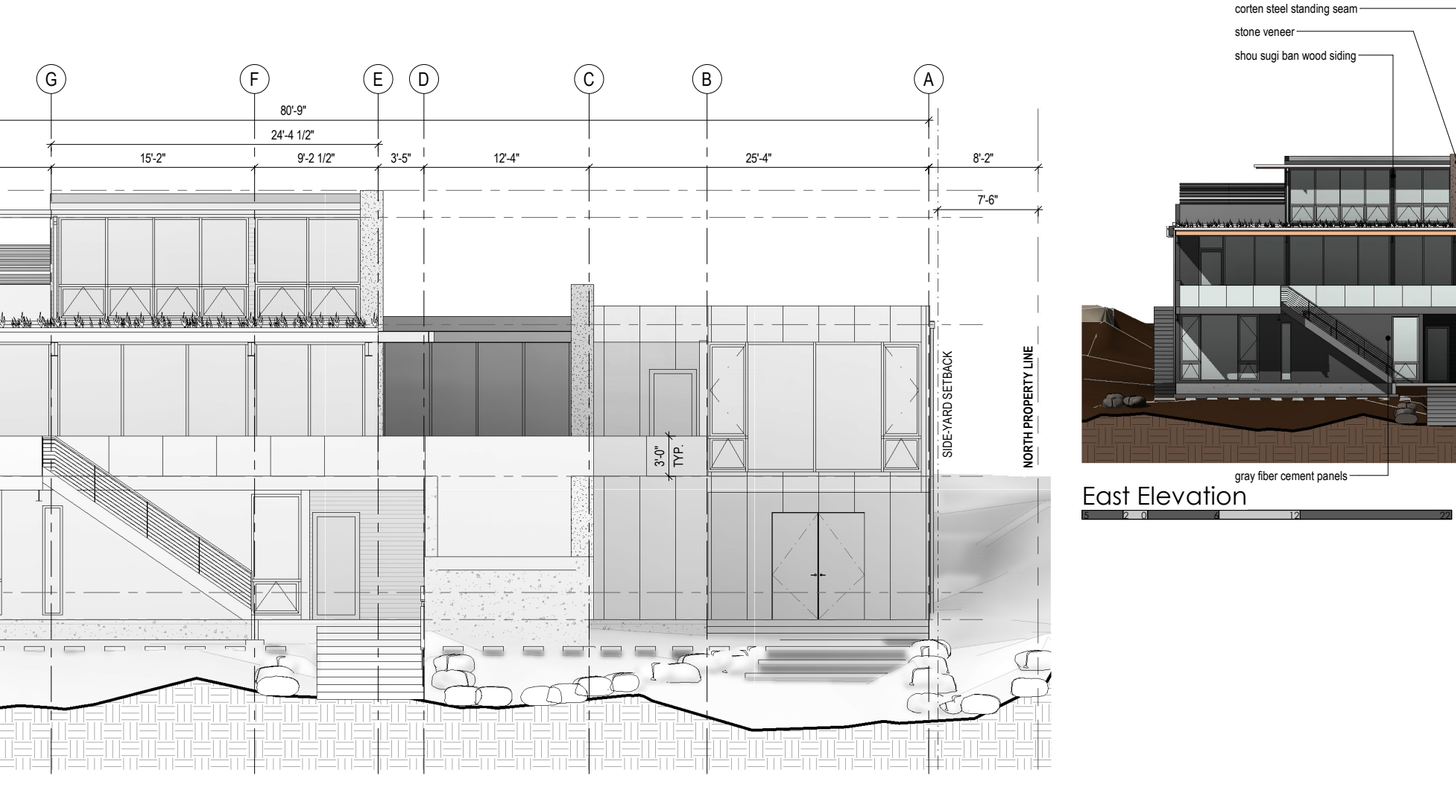
SCALE: 1" = 10'-0"
DATE: 05 February 2020

A1.2





North Elevation



East Elevation

Drawing Issues:

Owner:

Mike Neil
8002 Avalon Pl
Mercer Island, WA 98040

v 425.503.4068

Architect:

Build llc
Andrew van Leeuwen 5512 1st Ave NE
Seattle WA 98105

v 206.940.4314 f 206.382.4111

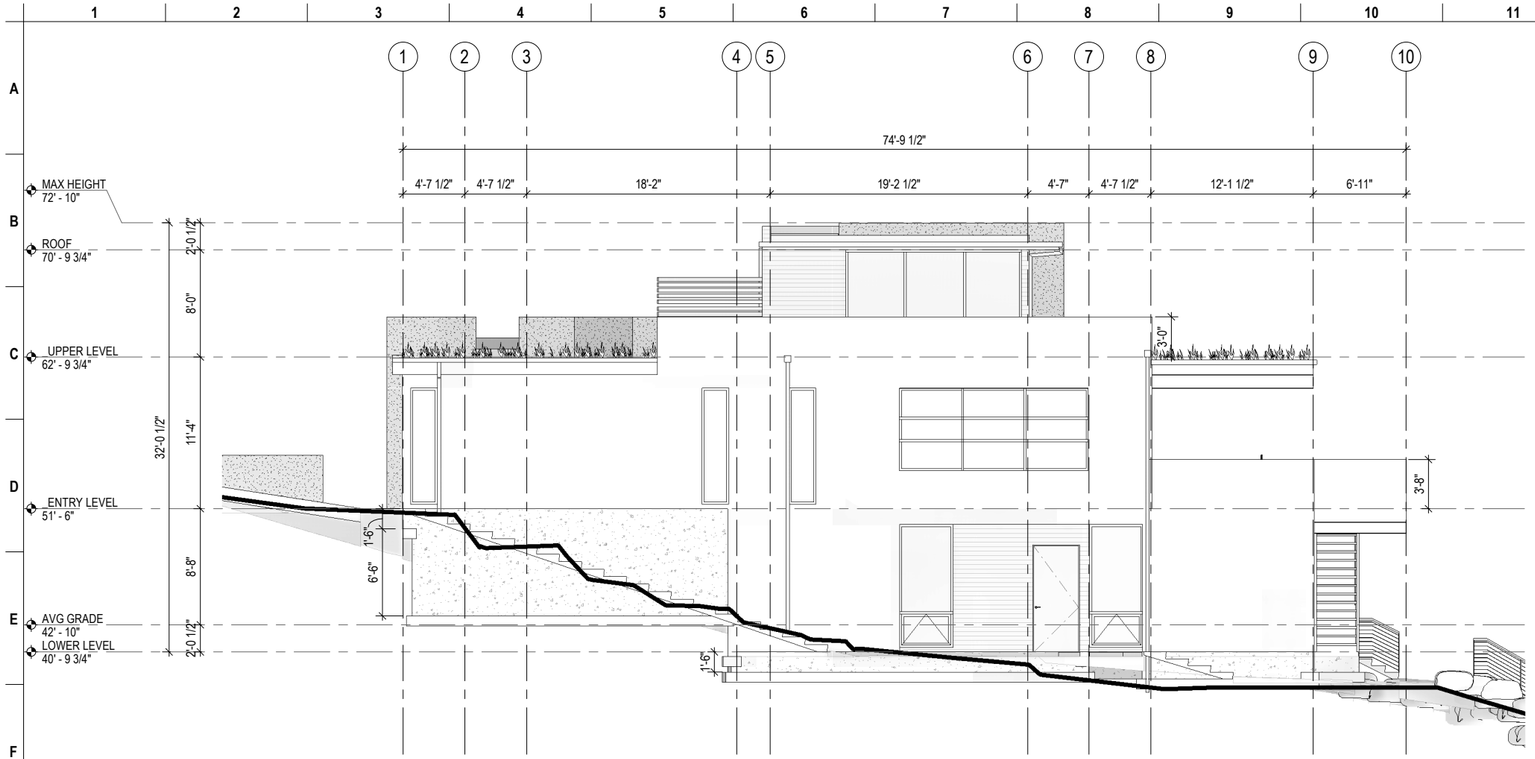
NEIL RESIDENCE

1440 W Lake Sam. Pkwy NE
Bellevue, WA 98008

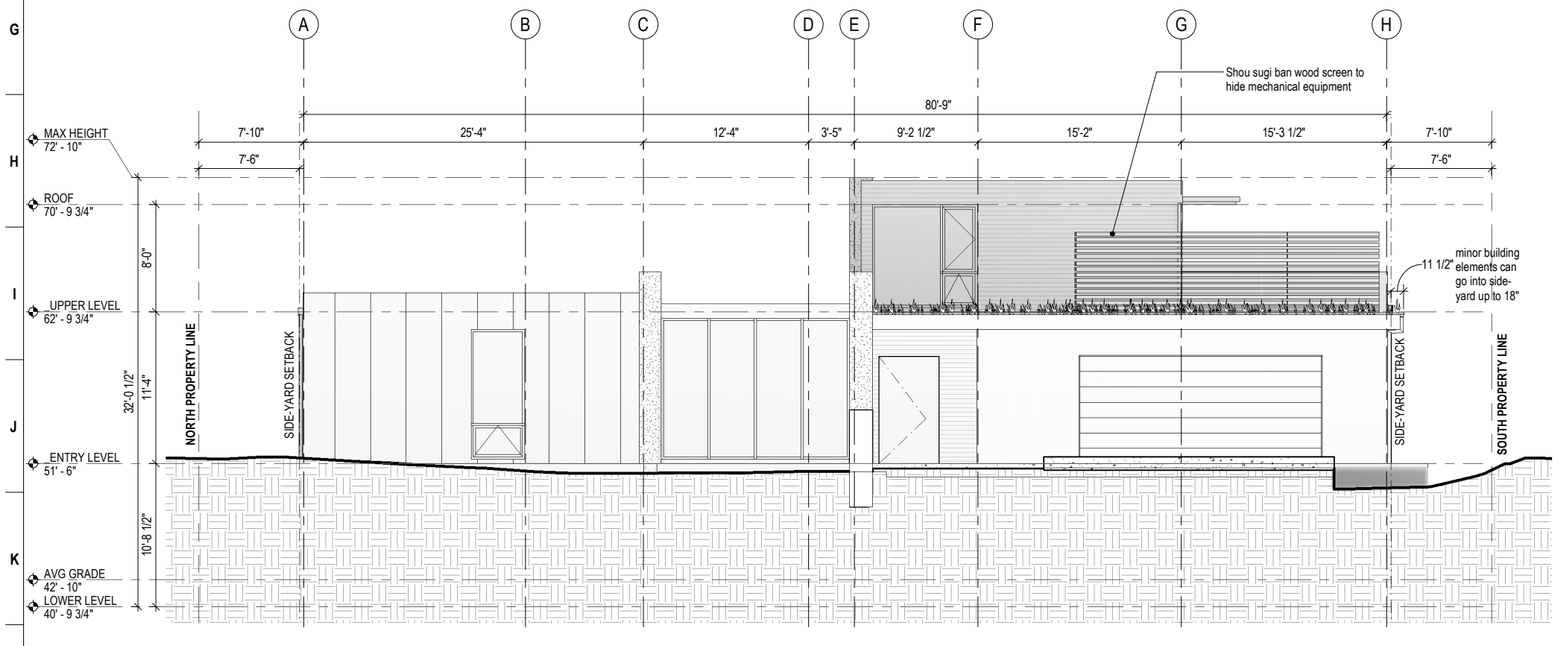
EXTERIOR ELEVATIONS

SCALE: As indicated
DATE: 18 May 2020

A3.1



South Elevation



West Elevation

Drawing Issues:

Owner:

Mike Neil
8002 Avalon Pl
Mercer Island, WA 98040

v 425.503.4068

Architect:

Build llc
Andrew van Leeuwen 5512 1st Ave NE
Seattle WA 98105

v 206.940.4314 f 206.382.4111

NEIL RESIDENCE

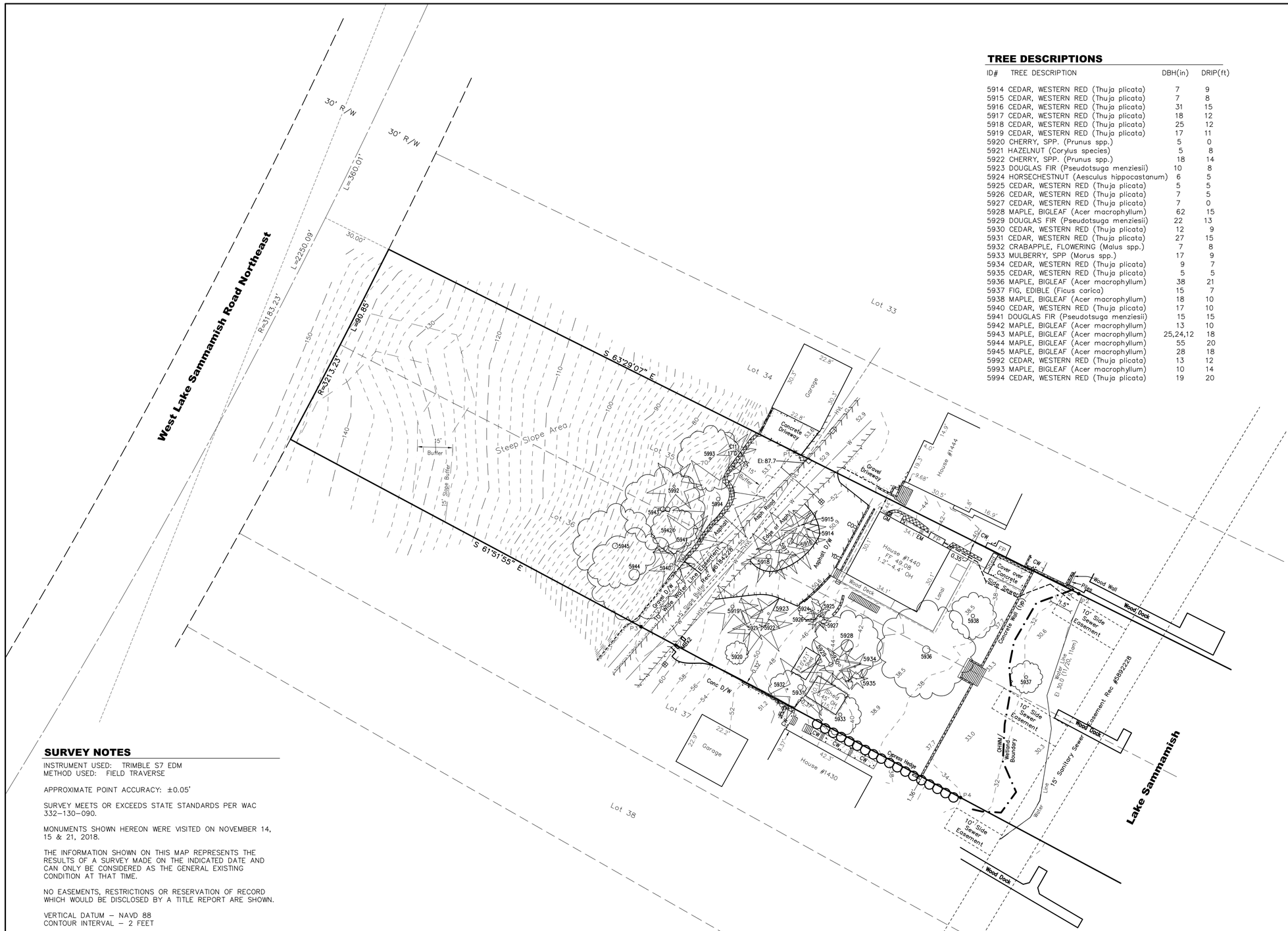
1440 W Lake Sam. Pkwy NE
Bellevue, WA 98008

EXTERIOR ELEVATIONS

SCALE: As indicated
DATE: 18 May 2020

A3.2

Table of Contents



TREE DESCRIPTIONS

ID#	TREE DESCRIPTION	DBH(in)	DRIP(ft)
5914	CEDAR, WESTERN RED (Thuja plicata)	7	9
5915	CEDAR, WESTERN RED (Thuja plicata)	7	8
5916	CEDAR, WESTERN RED (Thuja plicata)	31	15
5917	CEDAR, WESTERN RED (Thuja plicata)	18	12
5918	CEDAR, WESTERN RED (Thuja plicata)	25	12
5919	CEDAR, WESTERN RED (Thuja plicata)	17	11
5920	CHERRY, SPP. (Prunus spp.)	5	0
5921	HAZELNUT (Corylus species)	5	8
5922	CHERRY, SPP. (Prunus spp.)	18	14
5923	DOUGLAS FIR (Pseudotsuga menziesii)	10	8
5924	HORSECHESTNUT (Aesculus hippocastanum)	6	5
5925	CEDAR, WESTERN RED (Thuja plicata)	5	5
5926	CEDAR, WESTERN RED (Thuja plicata)	7	5
5927	CEDAR, WESTERN RED (Thuja plicata)	7	0
5928	MAPLE, BIGLEAF (Acer macrophyllum)	62	15
5929	DOUGLAS FIR (Pseudotsuga menziesii)	22	13
5930	CEDAR, WESTERN RED (Thuja plicata)	12	9
5931	CEDAR, WESTERN RED (Thuja plicata)	27	15
5932	CRABAPPLE, FLOWERING (Malus spp.)	7	8
5933	MULBERRY, SPP (Morus spp.)	17	9
5934	CEDAR, WESTERN RED (Thuja plicata)	9	7
5935	CEDAR, WESTERN RED (Thuja plicata)	5	5
5936	MAPLE, BIGLEAF (Acer macrophyllum)	38	21
5937	FIG, EDIBLE (Ficus carica)	15	7
5938	MAPLE, BIGLEAF (Acer macrophyllum)	18	10
5940	CEDAR, WESTERN RED (Thuja plicata)	17	10
5941	DOUGLAS FIR (Pseudotsuga menziesii)	15	15
5942	MAPLE, BIGLEAF (Acer macrophyllum)	13	10
5943	MAPLE, BIGLEAF (Acer macrophyllum)	25,24,12	18
5944	MAPLE, BIGLEAF (Acer macrophyllum)	55	20
5945	MAPLE, BIGLEAF (Acer macrophyllum)	28	18
5992	CEDAR, WESTERN RED (Thuja plicata)	13	12
5993	MAPLE, BIGLEAF (Acer macrophyllum)	10	14
5994	CEDAR, WESTERN RED (Thuja plicata)	19	20

MERIDIAN
NAD 83-91

GRAPHIC SCALE

−20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

LEGAL DESCRIPTION

LOTS 35 AND 36, ROSEMONT BEACH, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 34 OF PLATS, PAGE 28, RECORDS OF KING COUNTY, WASHINGTON.

APN: 743050−018

EXCEPTIONS

− EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN:
RECORDING NO: 3454506
FOR: PRIVATE ROADWAYS

− EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN:
RECORDED: APRIL 28, 1941
RECORDING NO: 3161079
IN FAVOR OF: PUGET SOUND ENERGY, INC. A WASHINGTON CORPORATION
FOR: ELECTRIC AND/OR GAS TRANSMISSION AND/OR DISTRIBUTION

− EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN:
RECORDING NO: 5892228
IN FAVOR OF: LAKE HILLS SEWER DISTRICT OF KING COUNTY
FOR: SANITARY SEWER LINE OR LINES

− EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN:
RECORDING NO: 6184228
IN FAVOR OF: WATER DISTRICT NO. 97
FOR: WATER LINE

− ROAD MAINTENANCE PROVISIONS, AND THE TERMS AND CONDITIONS THEREOF, CONTINED IN STATEMENT:
RECORDING NO: 7112030211

− CONDITIONS, NOTES, EASEMENTS, PROVISIONS AND/OR ENCROACHMENTS CONTAINED OR DELINEATED ON THE FACE OF THE SURVEY RECORDED UNDER RECORDING NO. 8701279026

− EASEMENT, INCLUDING TERMS AND PROVISIONS CONTAINED THEREIN:
RECORDING NO: 9101180240
IN FAVOR OF: WASHINGTON NATURAL GAS COMPANY, A WASHINGTON CORPORTATION, ITS SUCCESSORS AND ASSIGNS
FOR: GAS PIPELINE OR PIPELINES

− CONDITIONS, NOTES, EASEMENTS, PROVISIONS AND/OR ENCROACHMENTS CONTAINED OR DELINEATED ON THE FACE OF THE SURVEY RECORDED UNDER RECORDING NO. 20060424900009.

− THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT FOR INTRUSION INTO REQUIRED SETBACK"
RECORDED: JANUARY 24, 2008
RECORDING NO: 2008124001109

− THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED" AGREEMENT FOR INTRUSION INTO REQUIRED SETBACK FROM ADJACENT PROPERTY FOR PRIVATE MOORAGE"
RECORDED: OCTOBER 23, 2008
RECORDING NO: 20081023000646

− RIGHTS OF THE STATE OF WASHINGTON IN AND TO THAT PORTION OF SAID PREMISES, IF ANY, LYING IN THE BED OR FORMER BED OF LAKE SAMMAMISH, IF IT IS NAVIGABLE.

− EXCEPTIONS AND RESERVATIONS CONTAINED IN DEED FROM THE STATE OF WASHINGTON PER RECORDING NO: 758601

SURVEY NOTES

INSTRUMENT USED: TRIMBLE S7 EDM
METHOD USED: FIELD TRAVERSE

APPROXIMATE POINT ACCURACY: ±0.05'

SURVEY MEETS OR EXCEEDS STATE STANDARDS PER WAC 332−130−090.

MONUMENTS SHOWN HEREON WERE VISITED ON NOVEMBER 14, 15 & 21, 2018.

THE INFORMATION SHOWN ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE INDICATED DATE AND CAN ONLY BE CONSIDERED AS THE GENERAL EXISTING CONDITION AT THAT TIME.

NO EASEMENTS, RESTRICTIONS OR RESERVATION OF RECORD WHICH WOULD BE DISCLOSED BY A TITLE REPORT ARE SHOWN.

VERTICAL DATUM − NAVD 88
CONTOUR INTERVAL − 2 FEET

SITE BENCH MARK − PROPERTY LINE MARKER "P1" SET ON THE NORTHERLY PROPERTY LINE. ELEV. 53.43

BENCH MARK: Concrete Mon w/ City of Bellevue Brass Cap stamped "H514" & "V493" in Case; Top Mon to Top Rim Case 0.29 Feet Located 10' E E/P W Lake Sammamish Blvd NE 1200' N of 513 near Large Boulder. Elev: 150.7

PARCEL AREAS −

LAND AREA ABOVE WATER LINE = 32,580.0 SQUARE FEET

STEEP SLOPE AREA = 15,946.7 SQUARE FEET

AREA OUTSIDE OF STEEP SLOPE = 16,633.3 SQUARE FEET

PROPERTY CORNERS

P1 Set Tack in Lead w/ Tag, LS 30581, 192.83' O/S E

P2 Set Rebar & Cap on Line, LS 30581, 72.30 O/S W

P3 Set Rebar & Cap, LS 30581, 168.86 O/S E

P4 Set Rebar & Cap on Line, LS 30581, 77.15' O/S W

SURVEY IN THE:
N.E. 1/4, S.W. 1/4 SEC. 30 TWP. 25N., RGE. 6E., W.M.

BRENT L. EBLE
STATE OF WASHINGTON
30581
REGISTERED
PROFESSIONAL LAND SURVEYOR

TOPOGRAPHIC SURVEY

Mike Neil
1440 North Lake Sammamish Parkway Northeast
Bellevue, Wa 98008

EMERALD LAND SURVEYING, INC.
PO BOX 13694 MILL CREEK, WA 98082 PH. (425) 359-7198

DRAWN BY: HMM
CHECKED: BLE
PROJECT: 18685
DATE: 6/5/19

SHEET 1 **OF** 1

Critical Areas Report

NEIL RESIDENCE
CITY OF BELLEVUE

February 7, 2020

Prepared for:

City of Bellevue
PO Box 90012
Bellevue, WA 98009-9012

Prepared on behalf of (applicant):

Mike Neil
8002 Avalon Place
Mercer Island, WA 98040

The Watershed Company

Title-page image: Existing residence on the Neil property on Lake Sammamish. From the southern property boundary looking north.

THE WATERSHED COMPANY

750 Sixth Street South
Kirkland, WA 98033

p 425.822.5242
f 425.827.8136

watershedco.com

Reference Number: 190502

Contact: Alex Pittman
Environmental Planner

List of Figures

List of Tables

1. Introduction

1.1 Background and Purpose

The purpose of this report is to document potential critical area and buffer/setback and shoreline setback impacts associated with the proposed residential redevelopment project located on the shore of Lake Sammamish in the City of Bellevue, Washington (Figure 1). The project area is comprised of a single lot which is bisected by an access road and currently developed with a single-family residence (built in 1970). To the west of the access road is a steep slope, characterized by native vegetation and a robust canopy of large trees. To the east of the access road is the existing primary residential structure and appurtenant structures, including a shed, two small out-buildings set on cinder blocks, a retaining wall, and a wooden frame for a small dock. Portions of proposed improvements will occur within or adjacent to regulated wetlands and steep slopes, as well as within proximity to the shoreline.

The applicant proposes to redevelop the existing residence, driveway and garage, and to construct a new dock on Lake Sammamish. The proposed residence and associated hardscapes would be located within a wetland buffer and a steep slope toe-of-slope setback. Some improvements will also occur within the standard shoreline structure setback and shoreline vegetation conservation area (SVCA).

Bellevue Land Use Code (LUC) 20.25H.230 requires compliance with specific critical areas report criteria as part of any modification to a critical area or critical area buffer/setback, including a demonstration of how the development leads to equivalent or better protection of critical area functions and values. This report fulfills these criteria. Further, pursuant to LUC 20.25H.250(C)(1), this report has been prepared in conjunction with a geotechnical analysis report by Geotechnical Consultants, Inc. For technical details related to geologic hazard areas, reference the project geotechnical report and/or any subsequent documentation addressing geotech-specific City comments. In addition, this report includes a demonstration of compliance with the City's shoreline regulations (LUC 20.25E), including an assessment of impacts within the shoreline structure setback and shoreline vegetation conservation area, as well as impacts associated with the development of a new dock on Lake Sammamish. This report presents a detailed discussion of the habitat and vegetation on-site and how the proposed development can be achieved with no net loss of critical area functions and values.

1.2 Methods

Staff ecologists for The Watershed Company visited the site on May 16, 2019, to evaluate existing site conditions. Vegetative structure and composition, special habitat features, presence

of wildlife species and sign, and human disturbance were assessed, which inform the discussion of habitat presented in this report. Observations of established trees and dominant plant species on-site were utilized in preparation of the associated mitigation plan (Appendix A).

2. Project Site

2.1 Location and Description

The subject project is located at 1440 West Lake Sammamish Parkway NE (parcel #7430500180) in the City of Bellevue. Lake Sammamish borders the project area to the east, West Lake Sammamish Parkway NE borders the project area to the west, and single-family residences are located to the north and south. The parcel is bisected by the private access road, NE Rosemont Place. To the west of the access road is a steep slope, characterized by native vegetation and a robust canopy of large trees. The top of the slope is near West Lake Sammamish Parkway NE to the west, and it slopes downward toward Lake Sammamish to the east. To the east of the access road is the existing primary residential structure and appurtenant structures, including a shed, two small out-buildings set on cinder blocks, a retaining wall, and a wooden frame for a small dock. Vegetation is highly variable throughout this portion of the site. Near the residence there are large areas of mown lawn, ornamental landscaping beds, and a number of large trees. To the east of the retaining wall is a mix of native and invasive herbaceous vegetation along the shoreline of the lake. Existing on-site vegetation is discussed in detail in Section 3 of this report.

The site is situated along the shoreline of Lake Sammamish, in the City-defined Rosemont drainage basin of the Cedar-Sammamish Watershed (WRIA 8). According to the Natural Resources Conservation Service Web Soil Survey, the site is characterized by Alderwood and Kitsap silt loam soils. Any surface or groundwater on the site would be expected to flow east toward the lake. A lake-fringe wetland along Lake Sammamish was identified on-site during field investigations.

Figure 1. Vicinity and street level map (King County iMap).

3. Critical Areas

3.1 Geologic Hazard Areas

The subject property contains areas of steep slopes that meet the City's definition for critical area as a type of geologic hazard area. Areas of regulated steep slope have been determined by the project surveyor. Steep slopes are located to the west of NE Rosemont Place, sloping downward toward Lake Sammamish from West Lake Sammamish Parkway NE. Geologic hazard areas on-site are discussed in the *Geotechnical Engineering Study*, prepared by Geotechnical Consultants, Inc. (November 2019). Vegetation located in and adjacent to these critical areas provides a number of functions, discussed below.

3.2 Wetlands

Along the shoreline of Lake Sammamish is a lake-fringe wetland, identified by both The Watershed Company and Wetland Resources, LLC. This wetland is subject to the City of Bellevue's critical areas regulations, as described below. No other areas that meet the wetland definition established in LUC 20.25H.095(A) were identified on-site. Wetlands on-site are described in the *Neil Residence, Wetland Delineation Study*, prepared by The Watershed Company (December 2019). Vegetation in and adjacent to the on-site wetland is discussed further below.

3.3 Habitat Functions

Vegetation, whether located within or outside of critical areas, inherently provides some habitat functions. Habitat functions of the subject property have been assessed and are discussed in this section, consistent with the requirements of City of Bellevue's Land Use Code.

3.3.1 On-site Habitat

The parcel is bisected by the private access road, NE Rosemont Place. To the west of the access road is a steep slope, characterized by a robust canopy of large trees. A total of fifty-eight (58) significant trees are found in this area. This area is also infested with invasive English ivy, which covers most of the hillside and is growing on many of the trees on the slope. Western red cedar, Big-leaf maple, and Douglas-fir are the most abundant tree species on-site. Vegetation to the east of NE Rosemont Place is more variable. To the east of the access road is the existing primary residential structure and appurtenant structures, including a shed, two small out-buildings set on cinder blocks, a retaining wall, and a wooden frame for a small dock. Vegetation is highly variable throughout this portion of the site. Near the residence there are large areas of mown lawn, bare ground, ornamental landscaping beds, and a number of large trees. To the east of the retaining wall is a mix of native and invasive herbaceous vegetation along the shoreline of the lake, including horsetail, reed canarygrass, and bulrush.

Significant Trees. As described in the *Arborist Report* prepared by Davey Resource Group (November 2019), the site includes a total of eighty-three (83) significant trees. Twenty-five (25) of these trees occur to the east of NE Rosemont Place, while the remaining fifty-eight (58) occur in the steep slope area to the west of NE Rosemont Place.

Figure 2. Lake-fringe wetland and Lake Sammamish shoreline.

Figure 3. Forested steep slope to the west of NE Rosemont Place.

Figure 4. Areas of lawn, bare ground, and non-native landscaping to the south of the existing residence.

Figure 5. Existing residence, trees, and lawn areas.

Figure 6. Existing retaining wall, with shoreline area in the foreground and trees to the south of the existing residence in the background.

3.3.2 Off-site Habitat

The opportunity for the subject property to provide habitat is dependent upon the potential for the greater vicinity to act as a source for wildlife. Therefore, the presence or absence of habitat patches in the landscape surrounding the subject property is considered in this assessment.

The general habitat type used to categorize the study area vicinity is Urban and Mixed Environs in the Medium-density Zone (Johnson and O'Neil 2001). This habitat type may contain light industry mixed with dense residential development and some natural open spaces.

The area surrounding the subject property is urban and dominated by developed single-family residential land uses. Habitat areas within approximately 1/4 mile of the project site include Lake Sammamish and undeveloped parcels to the northwest. These parcels are larger and/or include more retained significant trees, resulting in some areas of interconnecting canopy cover. However, these habitat patches in the vicinity are mostly disconnected from on-site habitat by roads and development.

3.3.3 Wildlife

Wildlife species expected to utilize the project site most are species that are adapted to living in urban settings. These species generally include raccoons, opossums, Eastern gray squirrel, rats, mice, bats, and a number of birds like crows, starlings, robins, chickadees, and sparrows, to name a few.

During site investigations, no species of local importance were observed on the subject property, nor was habitat observed that is expected to have a primary association with any species of local importance given the local- and landscape-level conditions. However, wildlife

use of the property was observed during site investigations. These observations included a family of ducks in the immediate nearshore and lake-fringe wetland and deer foraging near the existing residence. Deer scat and browse were also observed in the lake-fringe wetland.

3.4 Water Quality, Hydrology, and Slope Stability Functions

In addition to habitat functions, vegetation also provides important water quality and hydrology functions. The ability of the site to perform these functions well is dependent upon the vegetation present (e.g., forested versus mowed lawn). Non-developed portions of the site to the west of the access road are vegetated with native trees and an understory of invasive English ivy. Areas closer to the residence include significant areas of lawn and ornamental landscaping. The immediate shoreline and wetland area, to the east of the retaining wall, contain a mix of native and non-native herbaceous vegetation. Vegetated (non-lawn) areas of the site are expected to intercept, allow for infiltration, and uptake rain and surface water, thereby functioning well to both filter water and reduce the quantity of water flowing down-gradient.

Furthermore, when located on slopes, vegetation can function to prevent soil erosion and improve slope stability. During heavy rain events, live vegetation and dead plant parts (e.g., dead stems, branches, leaves, etc.) prevent concentrated and potentially erosive flows from developing on steep slopes through rainwater interception. Vegetation growing on slopes also has the opportunity to provide slope stability through establishment of deep, inter-woven plant roots. Most native trees, shrubs, and groundcover plants perform this function well, while shallow-rooted weeds like Himalayan blackberry and English ivy, do not.

3.5 Species of Local Importance

The City of Bellevue designates habitat associated with species of local importance as a critical area [LUC 20.25H.150(B)]. As noted in Section 3.3.3, wildlife use on site is expected to be limited to mainly urban species. However, it is possible that some habitat on site could occasionally be used by species of local importance. Species of local importance [LUC 20.25H.150(A)] for which suitable habitat exists on the study property are bald eagle, pileated woodpeckers, Vaux's swift, merlin, great blue heron, osprey, and red-tailed hawk. The likelihood of each of these species utilizing the property is discussed below.

Bald eagles are common foragers over Lake Sammamish, and active nests are known in the lake area. Eagle nests are most commonly built near broken tops of tall trees, and in western Washington, nests in forks of large deciduous trees are also common. Potential nesting trees are located on the subject property, particularly to the west of NE Rosemont Place, but nearby areas provide more suitable nesting habitat, with greater tree density and less human disturbance. No

eagles or nests were observed on site during the site visit. Bald eagles were removed from the State's endangered species list in 2017 and the Washington Department of Fish and Wildlife (WDFW) no longer maps known bald eagle nests nor requires coordination on bald eagle plans for specific properties.

Pileated woodpeckers commonly use large conifers for drumming and foraging. The species is often spotted in suburban areas in King County. Individuals may occasionally use the large trees on the property, although the species' preferred large snags are not present. Suitable nesting sites for this species do not exist on the property.

Vaux's swifts forage in open skies over forests, lakes, and rivers, where insects are abundant. Lake Sammamish provides suitable foraging habitat, and the species may be present at times over the study area. Nesting normally takes place in old-growth forest where large, hollow snags are available. The study parcel does not provide nesting habitat for this species.

Merlins occur throughout western Washington in winter and during migration. Breeding birds are rare in the state. Occurrences are spotty but not uncommon in suburban areas, and the study parcel may provide a small amount of suitable hunting or perching area in the non-breeding season.

Purple martin is Washington State's least common swallow. The species forages over open water and could potentially use the lake area adjacent to the study property for foraging. There are no suitable standing snags available on the subject property for cavity-nesting.

Great blue herons are widespread in western Washington. Outside of breeding, which occurs in tall trees, commonly away from human disturbance, the birds are most often observed in and along rivers, lakes, and wetlands. The adjacent waters of Lake Sammamish are likely used by foraging and resting herons throughout the year.

Osprey are very common over Lake Sammamish. Osprey typically nest in trees adjacent and above water. No significant trees occur immediately adjacent to the shoreline, though two trees occur within 50 feet of the shoreline and could be used for perching.

Red-tailed hawks nest in large trees, and although no active nests are present, the on-site trees may be suitable for the species. However, nests are generally located in more extensive woodlands than the site offers. Red-tailed hawks are ubiquitous in this area and are likely to occasionally perch on or fly over the property.

Common loons prefer large, secluded lakes in the eastern part of the state for breeding. In winter, the species is most common on the coast and in saltwater bays and inlets, but can be seen on freshwater lakes near the coast as well. The open waters of Lake Sammamish are commonly used by wintering loons, but the species is unlikely to enter the study parcel.

Chinook and coho salmon migrate through Lake Sammamish. The lake itself does not provide spawning habitat. The lake is used by juveniles for migration, as well as rearing. Lake temperatures are warmer than preferred by these species, particularly in shallow areas, and the shoreline area provides no cover for hiding or cooling. The lake area immediately adjacent to the property is unlikely to be used extensively by these species.

Bull trout are rare or non-existent in Lake Sammamish. The species has a narrow temperature tolerance range, and is very unlikely to occur near the shallow waters adjacent to the study area.

River lamprey have been identified in Lake Sammamish. According to the U.S. Fish and Wildlife Service, the species has declined, present status is unknown, and little is known about their biology.

4. Local Regulations

4.1 Critical Areas

The City of Bellevue regulates wetland and steep slope critical areas, and their associated buffers/setbacks, in Chapter 20.25H (Critical Areas Overlay Districts) of the Bellevue Land Use Code (LUC). The footprint of the existing primary structure is excluded from being within critical areas, buffers, or setbacks [LUC 20.25H.035(B)]. Impacts within critical areas, buffer, and/or setbacks are also subject to the mitigation sequencing criteria of LUC 20.25H.215.

Steep Slopes

In Bellevue, steep slope critical areas are regulated in Part 20.25H (Critical Areas Overlay District) of the LUC. According to LUC 20.25H.120(A)(2), slopes of 40 percent or more that have a rise of at least 10 feet and exceed 1,000 square feet in area are designated as geologic hazard areas and therefore subject to the regulations of LUC 20.25H.120 through 20.25H.145. According to LUC 20.25H.120(B)(1)(b), steep slope critical areas require a top-of-slope buffer of 50 feet. Further, pursuant to LUC 20.25H.120(C)(2), steep slopes standard require a toe-of-slope setback of 75 feet. A large portion of the subject property is encumbered by steep slopes and/or buffers and setbacks.

Wetlands

Wetlands in shoreline jurisdiction are regulated under Part 20.25H (Critical Areas Overlay District) of Bellevue's Land Use Code (LUC). The lake-fringe wetland is classified as a Category II wetland with a habitat score of 5 points, and therefore requires a regulatory buffer of 110 feet. A structure setback of 20 feet is required from the edge of the buffer. The footprint of the existing primary structure is excluded from the regulatory wetland buffer and structure

setback. Impacts to wetland buffers can be authorized through the City's critical areas report process and are subject to a mitigation ratio of one-to-one.

4.1.1 Critical Area Functions Based on Application of Code Standards

If the regulations and standards of the LUC were applied to this site, the existing single-family residence would remain and existing vegetated areas would continue to be available for wildlife use. Lawn and ornamental landscaping areas would remain, and the site would likely remain void of woody, overhanging vegetation along the shoreline. Non-native and invasive species present would presumably remain and may proliferate, potentially degrading habitat over time. These species would be expected to have detrimental effects on the native vegetation present by out-competing native plants for light, nutrients, and/or water resources. Overall, critical area functions and values would be expected to decrease with time if the property was maintained in its current state.

4.1.2 Modification

Critical areas standards for wetlands, steep slopes, and their associated buffers/setbacks can only be modified through an approved critical areas report. The applicant must demonstrate that the modifications to the critical area, buffer, and setback, combined with any restoration efforts, will result in equivalent or better protection of critical area functions and values than would result from adhering to the standard application of the regulations (LUC 20.25H.230). Restoration activities would require monitoring and maintenance in accordance with LUC 20.25H.220, consistent with an approved restoration plan.

4.2 Habitat Associated with Species of Local Importance

As noted above, habitat associated with species of local importance are also regulated as a critical area according to LUC 20.25H.150(B). In this context, "habitat" is defined as "the place, including physical and biotic conditions, where a plant or animal usually occurs and is fundamentally linked to the distribution and abundance of species."

As described in Section 3.5, there is no on-site evidence of the presence of habitat associated with species of local importance, other than Lake Sammamish itself, which has known Chinook and coho salmon use, and which may be used for foraging and resting for bird species. Some of the trees on site could also occasionally support migrating or foraging bird species. However, the habitat on site, including the lake area immediately adjacent to the property, is unlikely to be used extensively by any of these species. Furthermore, WDFW Priority Habitat Species (PHS) data does not show the presence of any priority species within the vicinity. Therefore, it is The Watershed Company's opinion that the site is unencumbered by critical area habitat that has a primary association with species of local importance.

4.3 Shorelines

Work within 200 feet of the ordinary high water mark (OHWM) of Lake Sammamish is subject to the standards and provisions of LUC 20.25E. The subject parcel is located within the Shoreline Residential environment designation and includes a standard 50-foot shoreline structure setback, measured from the OHWM. Additionally, the site includes a 50-foot shoreline vegetation conservation area (SVCA), also measured from the OHWM. Any significant trees removed within 50 feet of the OHWM require replacement pursuant to LUC 20.25E.065(F)(8)(b) and LUC 20.25E.065(F)(8)(c)(iii).

Dimensional standards for the development of new residential docks are provided in LUC 20.25E.065(H)(a). These standards limit the total area for docks on Lake Sammamish to 480 SF, the maximum length to 150 feet, and the width to 4 feet within 30 feet of the OHWM and 6 feet beyond 30 feet of the OHWM. Ells are allowed 30 feet waterward of the OWHM. Docks may include up to four boat or watercraft lifts and one open-side structural boat moorage cover.

4.3.1 Modification

The shoreline structure setback can be reduced to a minimum of 25 feet, subject to the provisions of LUC 20.25E.065(F). Impacts within the SVCA must be calculated and offset pursuant to the debit/credit system outlined in LUC 20.25E.065(F)(8). Reduction of the shoreline structure setback and/or impacts within the SVCA do not require preparation of a critical areas report or shoreline special report; however, compliance with the specific shoreline provisions will be discussed in this report.

5. Project

5.1 Description

The proposed project involves redevelopment of the residential parcel by removing the existing outdated single-family structure and constructing a modern single-family residence. The existing retaining wall to the east of the house will be partially replaced with sections of stone wall and completely removed in areas, increasing the area of natural gradient from the shoreline of Lake Sammamish. The existing driveway will be reconfigured to provide access to the updated garage entry point. The proposed residence will encompass the footprint of the existing residence and will extend further to the south and east of the existing residence. The closest point of the residence will extend to within approximately 25 feet of the OHWM.

A new dock will also be constructed to facilitate recreation within Lake Sammamish in accordance with the dimensional standards identified in LUC 20.25E.065(H)(a). The total area of

the dock will be 455 SF, with a length of 70 feet and a walkway width of 4 feet within 30 feet of the OHWM. Approximately 40 feet waterward the OHWM, the walkway width is expanded to 6 feet. One boat lift and one jetski lift are proposed, including one open-side boat moorage cover. One ell is included on the dock, approximately 44 feet waterward of the OHWM.

Unavoidable impacts to wetland and steep slope critical area buffers/setbacks will occur through site development. In addition, the residence will encroach within both the standard shoreline structure setback and SVCA. To compensate for these impacts, on-site mitigation is proposed.

5.2 Mitigation Sequencing

Pursuant to LUC 20.25H.215, attempts to avoid and minimize impacts to the shoreline and on-site steep slopes and wetlands, including their buffers and setbacks, have been taken.

Avoidance. As previously mentioned, the entirety of the subject property is encumbered by critical areas and associated buffers/setbacks, and the shoreline setback/SVCA. Therefore, in order to redevelop the site with a new modern residence and dock structure that is consistent with the scale and character of existing homes in the vicinity, full avoidance of impacts is not possible. No direct impacts to the on-site wetland and steep slope critical areas are proposed.

Minimization. Minimization techniques were utilized during the design process in order to limit impacts. Design of the proposed residence utilizes the full extent of the existing residential footprint, while the driveway is relocated and represents a reduction of 412 SF in impervious surface area relative to the existing driveway. Expanded areas of the proposed single-family residence are to be constructed in an area partially comprised of low functioning lawn/bare ground/non-native vegetation. All existing sheds and outbuildings, all of which are located within the wetland buffer and one of which is also located within the shoreline setback/SVCA, will be removed. The proposed pier deck will be fully grated. Invasive species will be removed throughout the site and native plantings will comprise the entirety of the site's landscape plan. Portions of the existing retaining wall will be removed, increasing the area of natural gradient from the shoreline of Lake Sammamish. Furthermore, standard best management practices, including temporary erosion and sediment control measures, will be implemented during construction.

Mitigation. As mitigation for unavoidable, permanent impacts to critical areas, critical area buffer/setbacks, Lake Sammamish, and the shoreline setback/SVCA, 4,710 SF of the site will be enhanced through invasive weed removal and native plant installation (see details in Section 5.4 and Appendix A).

5.3 Impacts

5.3.1 Critical Area Impact Assessment

Project impacts to critical areas, buffers, and setbacks are summarized in Table 1, below, and discussed in detail in the following sub-sections. Impacts associated with the shoreline structure setback and SVCA are described in detail in Section 5.3.2.

Table 1. Project impact summary (quantities in square feet).

Critical Area Types	Existing Impacts	Proposed Impacts	Net Impact
110-ft Wetland Buffer	2,954 SF	6,205 SF	+ 3,251 SF
75-ft Standard Toe of Slope Setback Area	1,807 SF	2,661 SF	+ 854 SF

5.3.1.1 *Direct Impacts*

Permanent impacts, totaling 6,668 SF, are proposed to the wetland buffer and steep slope setback on-site. Of these impacts, a total of 5,558 SF occur within the wetland buffer, and a total of 2,661 SF occur within the standard steep slope setback. This compares to impacts associated with existing site conditions of 3,151 SF sitewide, including 2,954 SF of impacts within the wetland buffer and 1,807 SF of impacts within the steep slope setback. Therefore, the proposed project will result in a net increase of 3,517 SF of sitewide impacts, including a net increase of 3,251 SF of wetland buffer impacts and 854 SF of steep slope setback impacts. A total of eleven (11) significant trees will be removed from critical area buffers/setbacks as part of proposed activities.

These impacts have the potential to reduce the critical area functions discussed in Sections 3.3 and 3.4 (habitat, water quality, hydrology, and slope stability). Furthermore, the project has been developed in coordination with a geotechnical expert to ensure slope stability is maintained or improved.

5.3.1.2 *Indirect Impacts*

Disturbances associated with the proposed redevelopment of the property, like increased light and noise, are types of indirect effects on wildlife and habitat on-site. Introduction of domestic pets and fertilizer/herbicide use in landscape areas are also potential sources of indirect effects to wildlife/habitat from the proposed use. However, indirect impacts are not likely to significantly increase since the parcel is currently developed with a single-family residence and redevelopment is not expected to substantially change the use patterns of the site. The new residence will be larger than the existing residence and impervious/hardscape surfaces will increase. However, modern techniques and other low-impact development measures will be

implemented where feasible. This includes the use of concrete pavers, limitations to native vegetation only, and a decrease in lawn area (and corresponding potential for fertilizer/herbicide use). Replacement of significant trees with smaller mitigation trees will result in a temporal loss as new trees mature. Attempts to offset the temporal loss include maximizing the on-site mitigation area to be restored.

5.3.1.3 *Cumulative Impacts*

Impacts that result from collective changes over the landscape have the potential to affect habitat over time. The area within the vicinity of the project site is almost entirely developed with single-family residences. While some development or re-development can be expected, the overall character of the urban setting in not likely to change substantially. Residential neighborhoods, and other urban areas, do trend toward less mature native vegetation and more ornamental vegetation and impervious surface. The proposed project is consistent with this trend in that some vegetated areas will be replaced with development and increased impervious surface. However, the functions of retained habitat will be improved, not further degraded, once proposed mitigation activities are considered. Retained habitat is not likely to be developed further because of the presence of regulatory critical areas (wetlands and steep slopes) and shoreline areas.

In the event that nearby, undeveloped land is developed in a manner similar to what is proposed for this project, anticipated changes to habitat in the landscape may include a reduction in habitat quantity, increased habitat fragmentation and disturbance, and improved quality of retained habitat areas. Overall, the cumulative impacts to urban habitat from relatively small development proposals like this one are expected to be minor. This is primarily due to the fact that the majority of the surrounding area has already been developed and is unlikely to substantially change in the foreseeable future. Additionally, similar proposals may require restoration of degraded habitat areas (as does this one), in which case, wildlife habitat would benefit.

5.3.2 Shoreline Impact Assessment

Proposed improvements will occur within the standard 50-foot shoreline structure setback, as well as the 50-foot SVCA. Specifically, the proposed residence is to be situated approximately 25 feet from the OHWM. Exterior hardscape surfaces will occur adjacent to the residence, also within both the structure setback and SVCA. Impacts are to be calculated pursuant to LUC 20.25E.065(F)(8)(c)(i). Table 2 below summarizes proposed impact calculations.

Table 2. Shoreline Debit Calculations

Existing Land Cover of Areas to be Impacted	Area (SF)	Existing Value	Final Value	Change in Land Cover Value	Total Debit
0-25 ft from OHWM					
Impervious from Lawn	32	0.1	0.0	0.1	3.2
25-50 ft from OHWM					
Impervious from Lawn	994	0.1	0.0	0.1	99.4
				GRAND TOTAL:	**102.6**

As seen in Table 2 above, a total of 102.6 shoreline debits will result from proposed activities. This includes portions of the redeveloped single-family residence and associated hardscape surfaces within the standard shoreline structure setback and SVCA. Impacts will occur over areas meeting the criteria established in Chart 20.25E.065(F)(8)(d) of the LUC for existing impervious surface and lawn for the purposes of shoreline debit calculations, though small portions of impacted areas included areas of bare ground and native/non-native vegetation (all smaller than 200 square feet each). Two significant trees will be removed within the 50-foot SVCA, one of which occurs within 25 feet of the OHWM. In addition to on-site impacts to the shoreline setback and SVCA, 455 square feet of overwater impacts in Lake Sammamish are also proposed to develop a new residential dock.

5.4 Mitigation

The proposed mitigation plan (Appendix A) seeks to enhance a total of 4,794 SF of the site through invasive species removal and the planting of native trees, shrubs, and groundcover plants within the wetland buffer and steep slope setback. These restoration actions will serve as mitigation for the 3,517 SF of new structural/impervious coverage within the shoreline structure setback/SCVA and wetland and steep slope critical area buffers/setbacks, as well as for 455 SF of overwater impacts associated with the construction of a new dock. Of this total, 455 SF of the total mitigation area will account for overwater impacts, while the remaining 4,339 SF will account for upland impacts.

Upland impacts on-site occur within an overlapping set of regulatory buffers/setbacks. As such, mitigation planting areas serving as mitigation for upland impacts may fulfill mitigation requirements for wetland buffers, steep slope setbacks, and the shoreline setback/SVCA, concurrently.

5.4.1 Critical Area Mitigation

A mitigation ratio of one-to-one is required for impacts to wetland buffers [LUC 20.25H.105(C)(3)]. As discussed in Section 5.3.1, net impacts to the wetland buffer total 3,251 SF. A total of 4,069 SF of mitigation planting is proposed within the wetland buffer. A portion of this total area (455 SF) serves as mitigation for the proposed overwater impacts to Lake Sammamish (discussed in Section 5.3.2). As such, the remaining 3,614 SF of mitigation area within the wetland buffer serves to compensate for 3,251 SF of new impacts to the wetland buffer, exceeding the required mitigation ratio of one-to-one.

Additionally, a total of 2,053 SF of the proposed mitigation planting will occur within the standard steep slope setback, to compensate for 854 SF of impacts to the setback associated with the proposed redevelopment. In addition to the plantings which will occur directly within the setback, the remainder of the sitewide mitigation plantings will serve to enhance the habitat connectivity and functional value of the steep slope itself.

Overall, proposed mitigation measures will result in no net loss of critical area functions.

5.4.2 Shoreline Mitigation

As mitigation for shoreline impacts summarized in Table 2, a total of 1,232.9 shoreline credits are proposed. Shoreline credits will include the planting of native vegetation adjacent to the shoreline (0-10 feet from the OHWM) as well as slightly further landward (10-25 and 25-50 feet from the OHWM). Plantings will include native trees, shrubs, and groundcover. Shoreline credits are summarized in Table 3 below.

Table 3. Shoreline Credit Calculations

Proposed Land Cover Types	Area (SF)	Existing Value	Final Value	Change in Land Cover Value	Total Credit
Native vegetation, 25-50 from OHWM (from lawn)	531	0.1	0.6	0.5	265.5
Native vegetation, 25-50 feet from OHWM (from impervious)	128	0.0	0.6	0.6	76.8
Native vegetation, 25-50 feet from OHWM (from non-native)	255	0.25	0.6	0.35	89.2
Native vegetation, 0-25 feet from OHWM (from non-native)	1,030	0.25	0.8	0.55	566.5
Native vegetation, 0-25 from OHWM (from lawn)	187	0.1	0.8	0.7	130.9

Native vegetation, 0-25 feet from OHWM (from impervious)	130	0.0	0.8	0.8	104
SUBTOTAL:	2,261			TOTAL:	**1,232.9**
Native overhanging vegetation, 0-10 feet from the OWHM (pursuant to LUC 20.25E.065.F.8.c.iv)	75	---	---	---	---
GRAND TOTAL:	2,336				

Proposed shoreline credits, totaling 1,232.9, account for necessary mitigation to offset proposed impacts of 102.6 debits, pursuant to LUC 20.25E.065(F)(8)(c). Corresponding planting area within the shoreline structure setback/SVCA equates to 2,261 SF. An additional 75 SF of plantings will also occur within 0-10 feet of the OHWM, pursuant to LUC 20.25E.065(F)(8)(c)(iv). Proposed plantings will comply with the standards of LUC 20.25E.065(F)(8)(g).

In accordance with LUC 20.25E.065(F)(8)(c)(iii), a total of nine (9) replacement trees are proposed within shoreline jurisdiction to mitigate for the removal of two (2) significant trees within the 50-foot SVCA. Pursuant to LUC 20.25E.065(F)(8)(b), three (3) of the proposed replacement trees will be located within 50-feet of the OHWM to compensate for the removal of one (1) significant tree within 25-feet of the OHWM.

As mitigation for the development of a new 455 square foot dock, an additional 455 SF of mitigation planting is proposed on the subject property, pursuant to LUC 20.25E.060(D)(4), to enhance existing shoreline functions and values.

Overall, proposed mitigation measures will result in no net loss of shoreline ecological functions.

5.5 Critical Area Functional Lift Analysis

The proposed project, with incorporation of mitigation activities, will improve the functions of on-site critical areas. A qualitative analysis of the change in critical area functions is provided below. This analysis pertains to critical area/buffer/setback impacts only; shoreline specific mitigation compliance is discussed in the preceding section.

5.5.1 Water Quality, Hydrology, and Slope Stability

Existing Conditions. Existing vegetation within critical area buffer/setback areas is variable. The steep slope to the west of NE Rosemont Place is characterized by a robust canopy of native trees, with an understory of invasive English ivy. Near the residence there are large areas of mown lawn, bare ground, ornamental landscaping beds, and a number of large trees. To the east of the retaining wall is a mix of native and invasive herbaceous vegetation along the

shoreline of the lake, including horsetail, reed canarygrass, and bulrush. Functions currently provided by vegetation on-site include rain and surface water interception and transpiration. Vegetation also improves soil quality, which generally improves water infiltration into the soil. Vegetation on slopes aids in slope stability. However, shallow rooted, invasive plants (i.e., English ivy) provide limited slope stabilization functions. English ivy impairs slope stability functions by destabilizing trees growing on slopes.

Proposed Conditions. Redevelop the site with a modern residence in accordance with geotechnical recommendations and stormwater regulations. Replace areas of lawn, bare ground, invasive species, and ornamental landscaping with native trees, shrubs, and groundcovers throughout the site. Vegetation on the steep slope is retained.

Net Result. Slope stability is maintained and water quality and hydrology functions are improved, resulting in an overall net benefit to these functions on-site. New native plantings will have deeper root systems than the current areas of ornamental landscaping, lawn, and bare ground, reducing erosion potential and increasing soil stability. Additional rigid vegetation on-site will slow surface water flowing toward the wetland and shoreline.

5.5.2 Habitat

Existing Conditions. Existing vegetation within shoreline and critical area buffer/setback areas is variable. The steep slope to the west of NE Rosemont Place is characterized by a robust canopy of native trees, with an understory of invasive English ivy. Near the residence there are large areas of mown lawn, bare ground, ornamental landscaping beds, and a number of large trees. To the east of the retaining wall is a mix of native and invasive herbaceous vegetation along the shoreline of the lake, including horsetail, reed canarygrass, and bulrush. The existing vegetation assemblage, although largely disconnected from larger areas of vegetation, provides some habitat value to urban wildlife.

Proposed Conditions. Redevelop the site with a modern residence in accordance with geotechnical recommendations and stormwater regulations. Replace areas of lawn, bare ground, invasive species, and ornamental landscaping with native trees, shrubs, and groundcovers throughout the site. Vegetation on the steep slope is retained.

Net Result. Decrease in the quantity of vegetated areas available to provide wildlife habitat. Increase the habitat functions of retained vegetated areas, thereby improving habitat quality. Alteration of foraging, perching, and nesting opportunities for wildlife through tree removal and native plant installation. New native trees, shrubs and groundcover will be installed. Overall, the quality of habitat will be increased by replacing lawn, bare ground, invasive species, and ornamental landscaping with a dense and diverse native plant assemblage

appropriate to the eco-region and growing conditions on-site. New plantings will provide food, cover, and nesting opportunities for wildlife.

6. Critical Areas Report Criteria

As previously mentioned, critical areas and their associated buffers/setbacks, may be modified pursuant to LUC 20.25H.230. The Director may approve modifications if it can be shown that, through restoration, the modification will result in equivalent or better protection of critical area functions and values. The existing project site contains areas of low-functioning critical area buffers/setbacks.

Per the LUC, the critical areas report must meet specific decision criteria in order for the Director to approve a proposal to modify the regulated wetland and steep slope critical area buffers/setbacks. Compliance with the relevant critical areas report criteria is addressed below.

LUC 20.25H.250(B) – Minimum Report Requirements

1. *Identification and classification of all critical areas and critical area buffers on the site;*
2. *Identification and characterization of all critical areas and critical area buffers on those properties immediately adjacent to the site;*

Critical areas and buffers located on or adjacent to the subject property are described in Sections 3 and 4, respectively.

3. *Identification of each regulation or standard of this code proposed to be modified;*

The subject site contains a Category II lake-fringe wetland, as defined by LUC 20.25H.095(A), and one area of steep slope, as defined by LUC 20.25H.120(A)(2). Pursuant to LUC 20.25H.095(D)(1)(a)(i), a 110-foot buffer is required for Category II wetlands with a habitat score of five to seven. Pursuant to LUC 20.25H.120(B)(1)(b) and 20.25H.120(C)(2)(b), a 50-foot top-of-slope buffer and 75-foot toe-of-slope setback are required. The applicant proposes to demolish the existing residence and redevelop a new modern residence within portions of the wetland and steep slope critical area buffer/setback areas. Reconfigured paved areas and hardscapes will also occur within these areas.

3. *A habitat assessment consistent with the requirements of LUC 20.25H.165;*

Habitat is assessed in Section 3.3. Referenced requirements are addressed below under the Habitat Assessment subsection.

4. *An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;*

Cumulative impacts are discussed in Section 5.3.1.3.

5. *An analysis of the level of protection of critical area functions and values provided by the regulations or standards of this code, compared with the level of protection provided by the proposal. The analysis shall include:*

    a. *A discussion of the functions and values currently provided by the critical area and critical area buffer on the site and their relative importance to the ecosystem in which they exist;*
    b. *A discussion of the functions and values likely to be provided by the critical area and critical area buffer on the site through application of the regulations and standards of this Code over the anticipated life of the proposed development; and*
    c. *A discussion of the functions and values likely to be provided by the critical area and critical area buffer on the site through the modifications and performance standards included in the proposal over the anticipated life of the proposed development;*

Discussion of current critical area functions is provided in Section 3. Critical area functions and values expected through application of standard regulations is provided in Section 4.1.1. The anticipated improvement of functions is provided in the functional lift evaluation in Section 5.5.

6. *A discussion of the performance standards applicable to the critical area and proposed activity pursuant to LUC 20.25H.160, and recommendation for additional or modified performance standards, if any;*

No species of local importance have been determined to have a primary association with the habitat available on the property, therefore additional performance standards (WDFW recommendations) do not apply. No additional or modified performance standards are proposed.

7. *A discussion of the mitigation requirements applicable to the proposal pursuant to LUC 20.25H.210, and a recommendation for additional or modified mitigation, if any; and*

A mitigation plan has been developed to meet the requirements of the LUC. No additional or modified mitigation is proposed.

8. *Any additional information required for the specific critical area as specified in the sections of this part addressing that critical area.*

None at this time.

LUC 20.25H.165(A) – Habitat Assessment

1. *Detailed description of vegetation and habitat on and adjacent to the site;*

See Section 3.3.

2. *Identification of any species of local importance that have a primary association with habitat on or adjacent to the site and assessment of potential project impacts to the use of the site by the species;*

No species of local importance have a primary association with on-site habitat. See Sections 3.5 and 4.2.

3. *A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the site;*

Since no species have a primary association, special management recommendations do not apply.

4. *A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;*

See Section 5.3.

5. *A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed use or activity and to be conducted in accordance with the mitigation sequence set forth in LUC 20.25H.215; and*

Mitigation sequencing is demonstrated in Section 5.2.

6. *A discussion of ongoing management practices that will protect habitat after the site has been developed, including proposed monitoring and maintenance programs.*

A mitigation plan has been developed, described in Section 5.4, and included as Appendix A, which includes five years of mitigation site monitoring and maintenance.

LUC 20.25H.255 – Critical areas report – Decision criteria

To allow a critical area, buffer, or setback modification through an approved critical areas report, the Director must also find compliance with the decision criteria established in LUC 20.25H.255(A) and (B). Compliance with the relevant sections listed in LUC 20.25H.255(A) and (B) is addressed below.

A. General.

1. *The modifications and performance standards included in the proposal lead to levels of protection of critical area functions and values at least as protective as application of the regulations and standards of this code.*

See functional lift analysis in Section 5.5.

2. *Adequate resources to ensure completion of any required mitigation and monitoring efforts.*

The mitigation plan specifies appropriate species for planting and planting techniques, describes proper maintenance activities, and sets forth performance standards to be met yearly during monitoring to ensure that restoration plantings will be maintained, monitored, and successfully established within the first five years following implementation. Furthermore, to ensure that the proposed plantings are installed and that the five-year maintenance and monitoring plan is implemented, if required, the applicant will post an Installation Assurance Device and a Maintenance Assurance Device prior to building permit issuance.

3. *The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site.*

Proposed mitigation will improve the functions of on-site critical areas and buffers/setbacks. Mitigation activities will have positive effects on nearby off-site areas as well by replacing invasive species and low-functioning areas of lawn and ornamental landscaping with native trees, shrubs, and groundcover, which will improve habitat, water quality, hydrology, and slope stability functions.

4. *The resulting development is compatible with other uses and development in the same land use district.*

The proposed structure is compatible with adjacent properties and surrounding development within the same land use district. Adjacent properties include residential land uses.

B. *Decision Criteria – Proposals to Reduce Regulation Critical Area Buffer*

1. *The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in overall critical area or critical area buffer functions.*

A mitigation plan is included as Appendix A and a functional lift analysis is provided in Section 5.5.

2. *The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in the most important critical area or critical area buffer functions to the ecosystem in which they exist.*

See functional lift analysis in Section 5.5.

3. *The proposal includes a net gain in stormwater water quality function by the critical area buffer or by elements of the development proposal outside of the reduced regulated critical area buffer.*

See functional lift analysis in Section 5.5.

4. *Adequate resources to ensure completion of any required restoration, mitigation and monitoring efforts;*

The mitigation plan specifies appropriate species for planting and planting techniques, describes proper maintenance activities, and sets forth performance standards to be met yearly during monitoring to ensure that restoration plantings will be maintained, monitored, and successfully established within the first five years following implementation. Furthermore, to ensure that the proposed plantings are installed and that the five-year maintenance and monitoring plan is implemented, if required, the applicant will post an Installation Assurance Device and a Maintenance Assurance Device prior to building permit issuance.

5. *The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and*

Proposed mitigation will improve the functions of on-site critical areas and buffers/setbacks. Mitigation activities will have positive effects on nearby off-site areas as well by replacing invasive species and low-functioning areas of lawn and ornamental landscaping with native trees, shrubs, and groundcover, which will improve habitat, water quality, hydrology, and slope stability functions.

6. *The resulting development is compatible with other uses and development in the same land use district. (Ord. 5680, 6-26-06, § 3)*

The proposed residence is compatible with adjacent properties and surrounding development within the same land use district. Adjacent properties include single-family residences of a similar scale and character.

Additional LUC 20.25H Criteria

Additional decision criteria related to geologic hazard areas is concurrently being addressed by Geotechnical Consultants, Inc. in their geotechnical report, including the following sections:

- LUC 20.30P.140 – Critical areas report – Additional provisions for landslide hazards and steep slopes
- LUC 20.25H.125 – Performance standards – Landslide hazards and steep slopes
- LUC 20.25H.145 – Critical areas report – Approval of modification

7. Summary

Redevelopment is proposed on a property entirely encumbered by wetland and steep slope critical areas and associated buffers/setbacks, as well as a shoreline structure setback and SVCA. The existing residence on the parcel will be removed and replaced with a modern residence. The driveway and other paved areas on-site will be re-configured, and a new dock will be constructed. Proposed activities will result in new permanent impacts to critical areas, buffers, setbacks, as well as the shoreline structure setback and SVCA.

Impacts to the shoreline structure setback and SVCA will be fully compensated for through the installation of native plantings adjacent to the shoreline. This approach is consistent with the criteria of the City's shoreline master program and will result in no net loss of shoreline ecological functions.

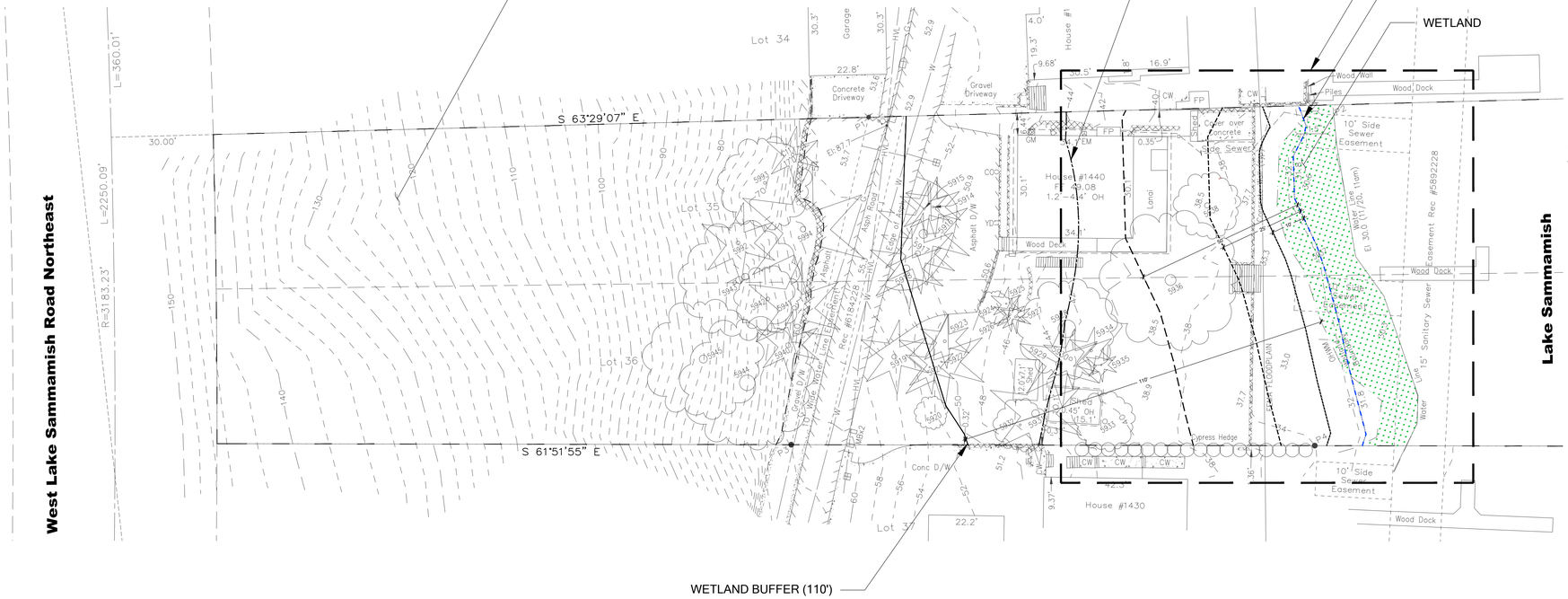
As mitigation for proposed impacts to shoreline and critical area buffers and setbacks, a significant portion of the site will be enhanced with native vegetation. This approach follows the City's critical areas report process, as described within this document. The proposed planting plan complies with shoreline vegetation conservation regulations and results in better protection of critical area functions and values than would be provided by the standard application of the wetland and geologic hazard area regulations. No loss of shoreline or critical area ecological function is expected as a result of proposed actions. Overall a net gain in shoreline and critical area buffer/setback functions and values is proposed both on- and off-site.

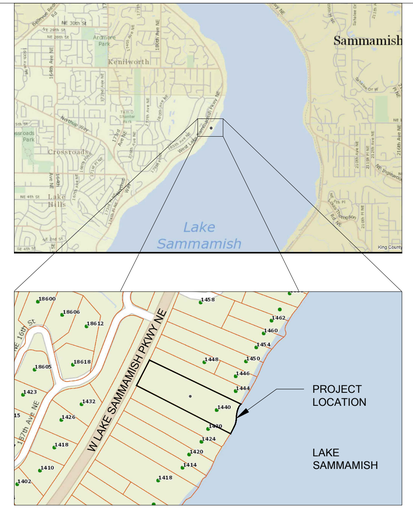
References

Johnson, D.H. and T.A. O'Neil. 2001. Wildlife-Habitat Relations in Oregon and Washington. Oregon State University Press. Corvallis, OR.

Appendix A

MITIGATION PLAN





VICINITY MAPS

LEGEND

- PROPERTY LINE
- WETLAND
- WETLAND BUFFER (110')
- SHORELINE OHWM (31.8' NAVD 88 PER LUC 20.25E.050.B2)
- 10' FROM OHWM
- INNER SHORELINE SETBACK (25' FROM OHWM)
- SHORELINE SETBACK/SVCA (50' FROM OHWM)
- STEEP SLOPE - TOE OF SLOPE
- STEEP SLOPE SETBACK (75' FROM TOE OF SLOPE)

SHEET INDEX

NOTES

1. CRITICAL AREAS DELINEATED BY WETLAND RESOURCES, INC. ON NOVEMBER 19, 2018. DELINEATION CONFIRMED BY THE WATERSHED COMPANY ON MAY 19, 2019.
2. SURVEY DATED 01/04/19, BY EMERALD LAND SURVEYING, INC. RECEIVED FROM BUILD LLC.

EXISTING CONDITIONS

SCALE 1:20

0' 10' 20' 40' 80'

PERMIT SET - NOT FOR CONSTRUCTION

THE WATERSHED COMPANY

750 Sixth Street South
Kirkland WA 98033

p 425.822.5242
www.watershedco.com

Science & Design

NEIL MITIGATION PLAN

BUILDING PERMIT SET
PREPARED FOR MIKE NEIL
PARCEL # 7430500180
1440 W LAKE SAMMAMISH PKWY NE
BELLEVUE, WA 98008

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
1	02-11-20	CALUP	GM

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER:
DESIGNED:
DRAFTED:
CHECKED:
JOB NUMBER:
190502
SHEET NUMBER:
W1 OF 7

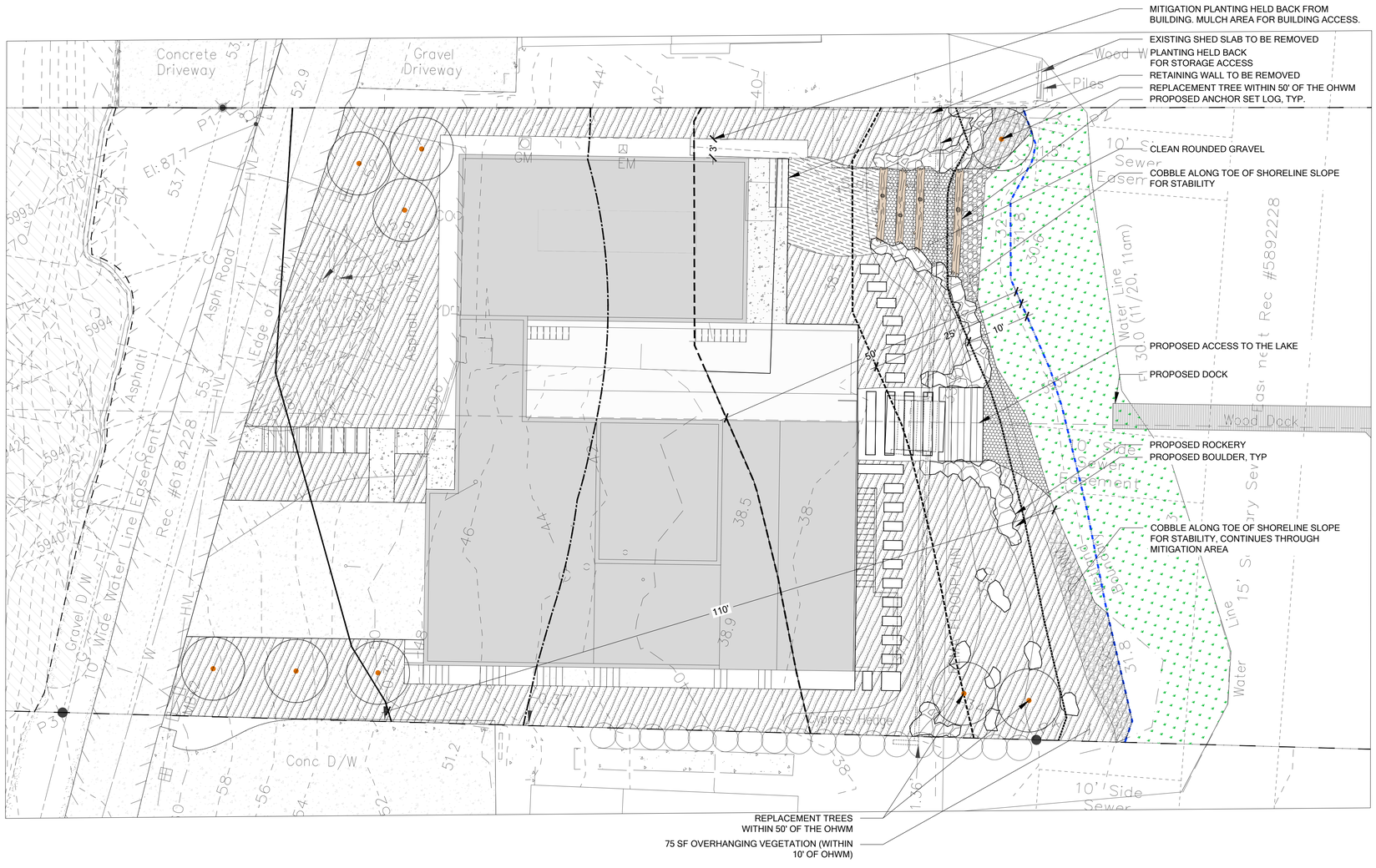
FILENAME
PRINTED BY
DATE

IMPACTS

1. TOTAL SITE AREA WITHIN 110' WETLAND BUFFER = 6,205 SF (3,251 SF OF NEW IMPACTS)
2. TOTAL SITE AREA WITHIN STEEP SLOPE, 75' TOE OF SLOP SETBACK = 2,661 SF (854 SF OF NEW IMPACTS)

LEGEND

- PROPERTY LINE
- WETLAND
- WETLAND BUFFER (110')
- SHORELINE OHWM (SURVEYED)
- 10' FROM OHWM
- INNER SHORELINE SETBACK (25' FROM OHWM)
- SHORELINE SETBACK/SVCA (50' FROM OHWM)
- STEEP SLOPE - TOE OF SLOPE
- STEEP SLOPE SETBACK (75' FROM TOE OF SLOPE)
- PROPOSED MITIGATION PLANTING AREA
  - 4,069 SF WITHIN WETLAND BUFFER
  - 2,053 SF WITHIN SLOPE SETBACK



PROPOSED SITE PLAN AND IMPACTS ANALYSIS

SCALE 1:10

0' 5' 10' 20' 40'

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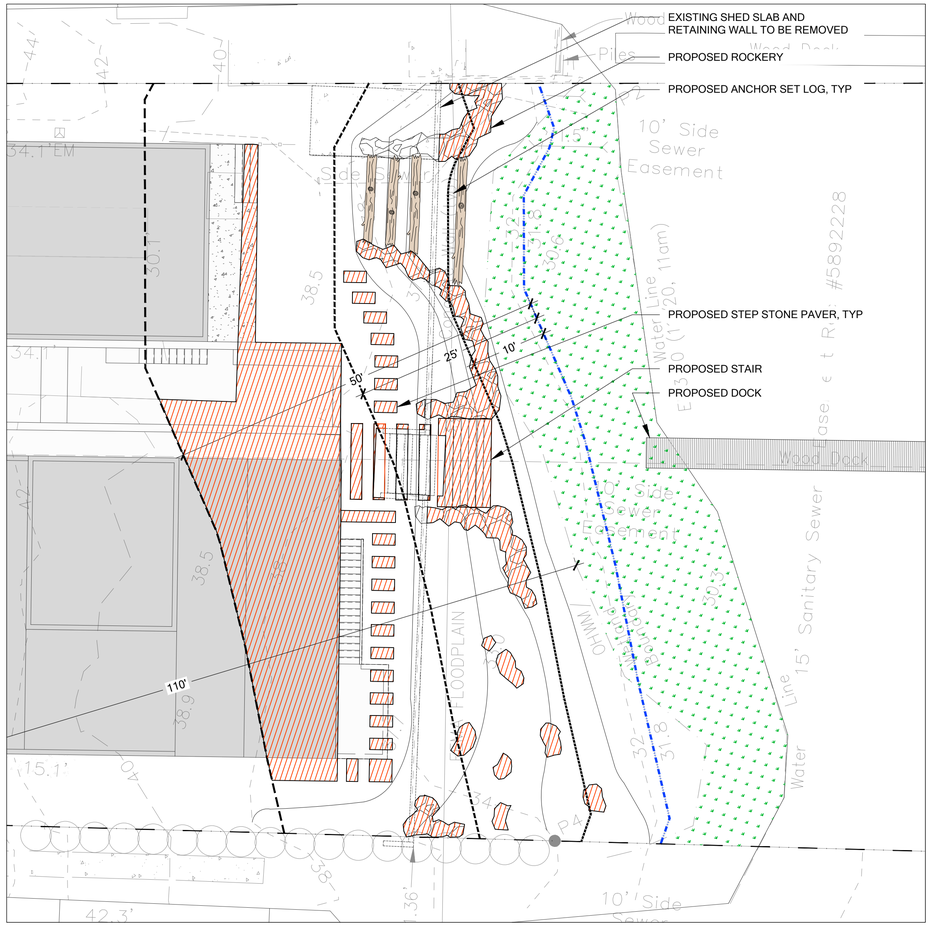
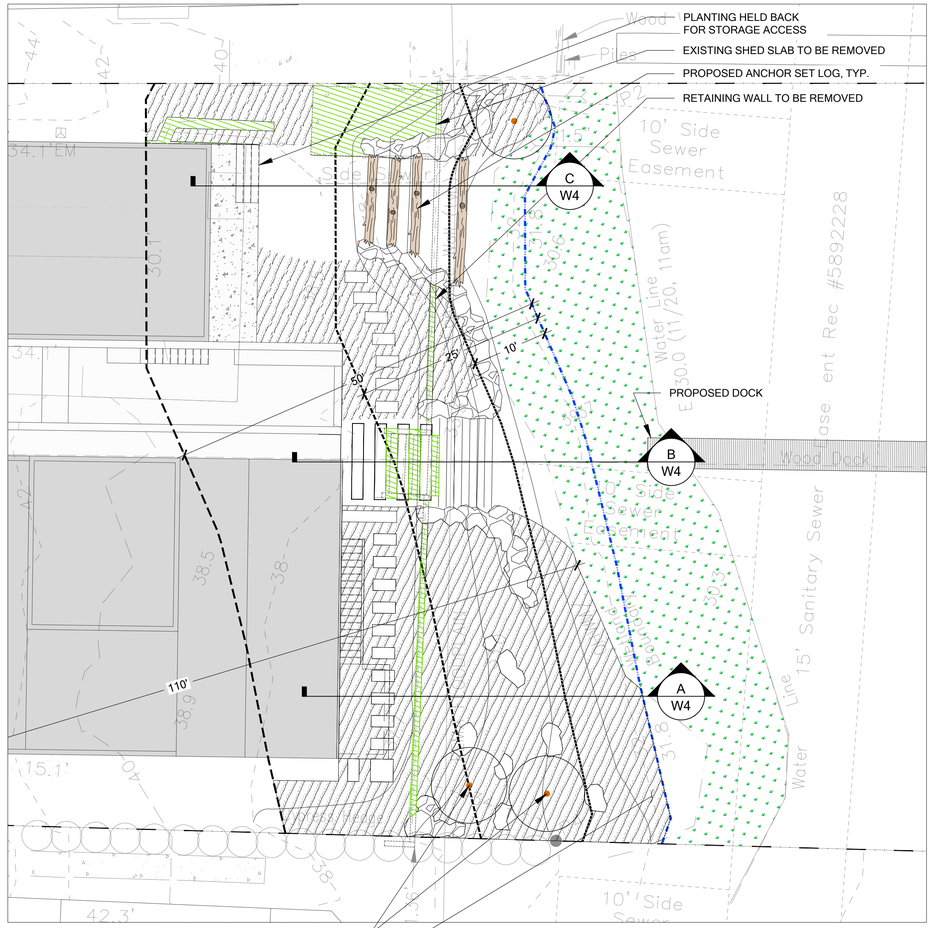


SHORELINE IMPACTS (DEBITS) INSET PLAN

SCALE 1:10



SHORELINE MITIGATION (CREDITS) INSET PLAN

SCALE 1:10

LEGEND

- PROPERTY LINE
- WETLAND
- SHORELINE OHWM
- 10' FROM OHWM
- INNER SHORELINE SETBACK (25' FROM OHWM)
- SHORELINE SETBACK/SVCA (50' FROM OHWM)
- PROPOSED CHANGE:
  - NON NATIVE/LAWN TO IMPERVIOUS

SHORELINE CREDIT CALCULATIONS

Proposed Land Cover Types	Area (SF)	Existing Value	Final Value	Change in Land Cover Value	Total Credit
Native vegetation, 25-50 from OHWM (from lawn)	531	0.1	0.6	0.5	265.5
Native vegetation, 25-50 feet from OHWM (from impervious)	128	0.0	0.6	0.6	76.8
Native vegetation, 25-50 feet from OHWM (from non-native)	255	0.25	0.6	0.35	89.2
Native vegetation, 0-25 feet from OHWM (from non-native)	1,030	0.25	0.8	0.55	566.5
Native vegetation, 0-25 from OHWM (from lawn)	187	0.1	0.8	0.7	130.9
Native vegetation, 0-25 feet from OHWM (from impervious)	130	0.0	0.8	0.8	104
SUBTOTAL:	2,261			TOTAL:	**1,232.9**
Native overhanging vegetation, 0-10 feet from the OWHM (pursuant to LUC 20.25E.065.F.8.c.iv)	75	---	---	---	---
GRAND TOTAL:	2,336				

LEGEND

- PROPERTY LINE
- WETLAND
- SHORELINE OHWM
- 10' FROM OHWM
- INNER SHORELINE SETBACK (25' FROM OHWM)
- SHORELINE SETBACK/SVCA (50' FROM OHWM)
- PROPOSED MITIGATION:
  - IMPERVIOUS TO NATIVE PLANTING
  - NONNATIVE/LAWN TO NATIVE PLANTING

SHORELINE IMPACTS AND MITIGATION PLAN

SCALE 1:10

0' 5' 10' 20' 40'

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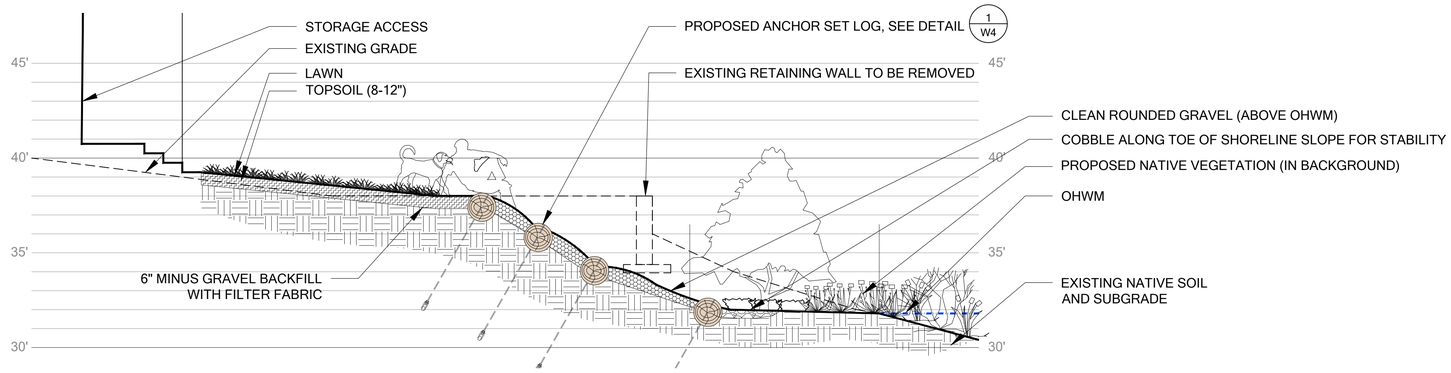
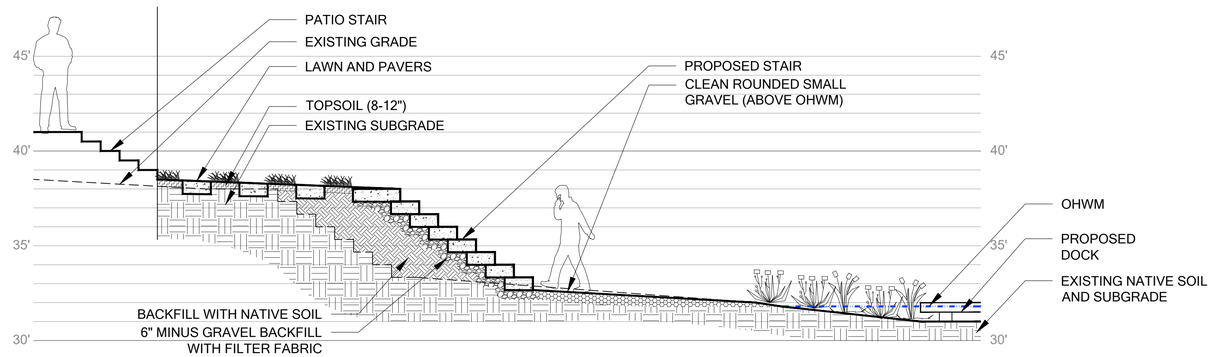


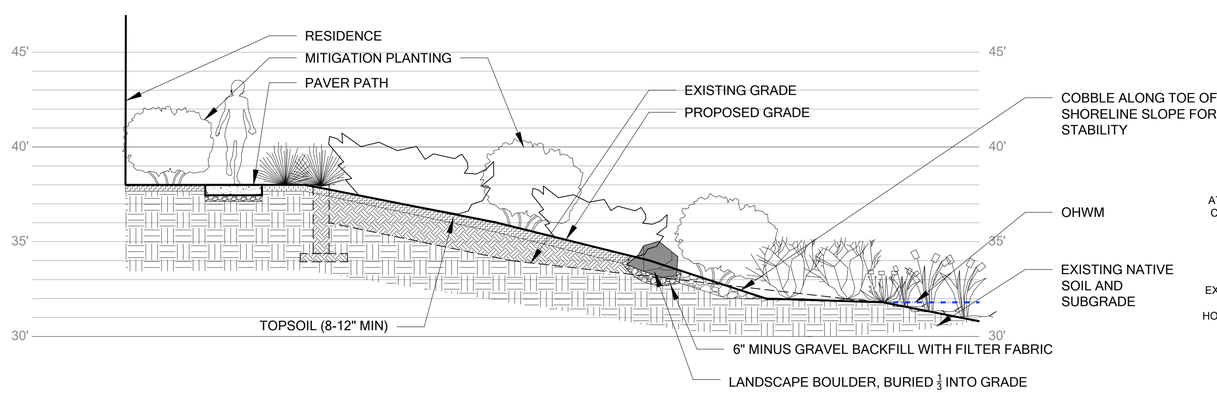
C SHORELINE SECTION

SCALE 1/4" = 1'-0"



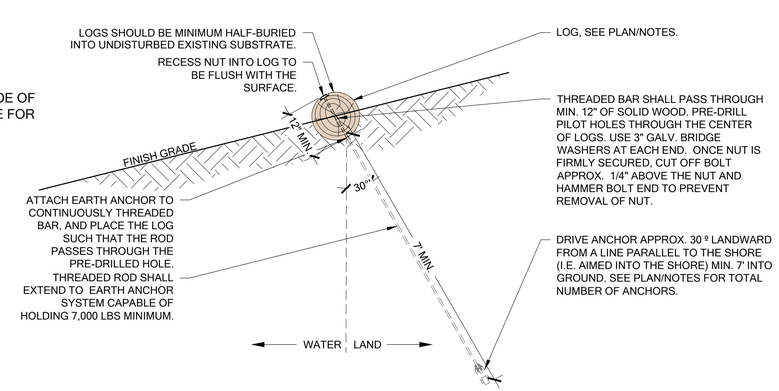
B SHORELINE SECTION

SCALE 1/4" = 1'-0"



A SHORELINE SECTION

SCALE 1/4" = 1'-0"



1 LOG ANCHORING DETAIL

SCALE: NTS

SHORELINE SECTIONS AND DETAILS

SCALE AS SHOWN

0' 2' 4' 8' 16'

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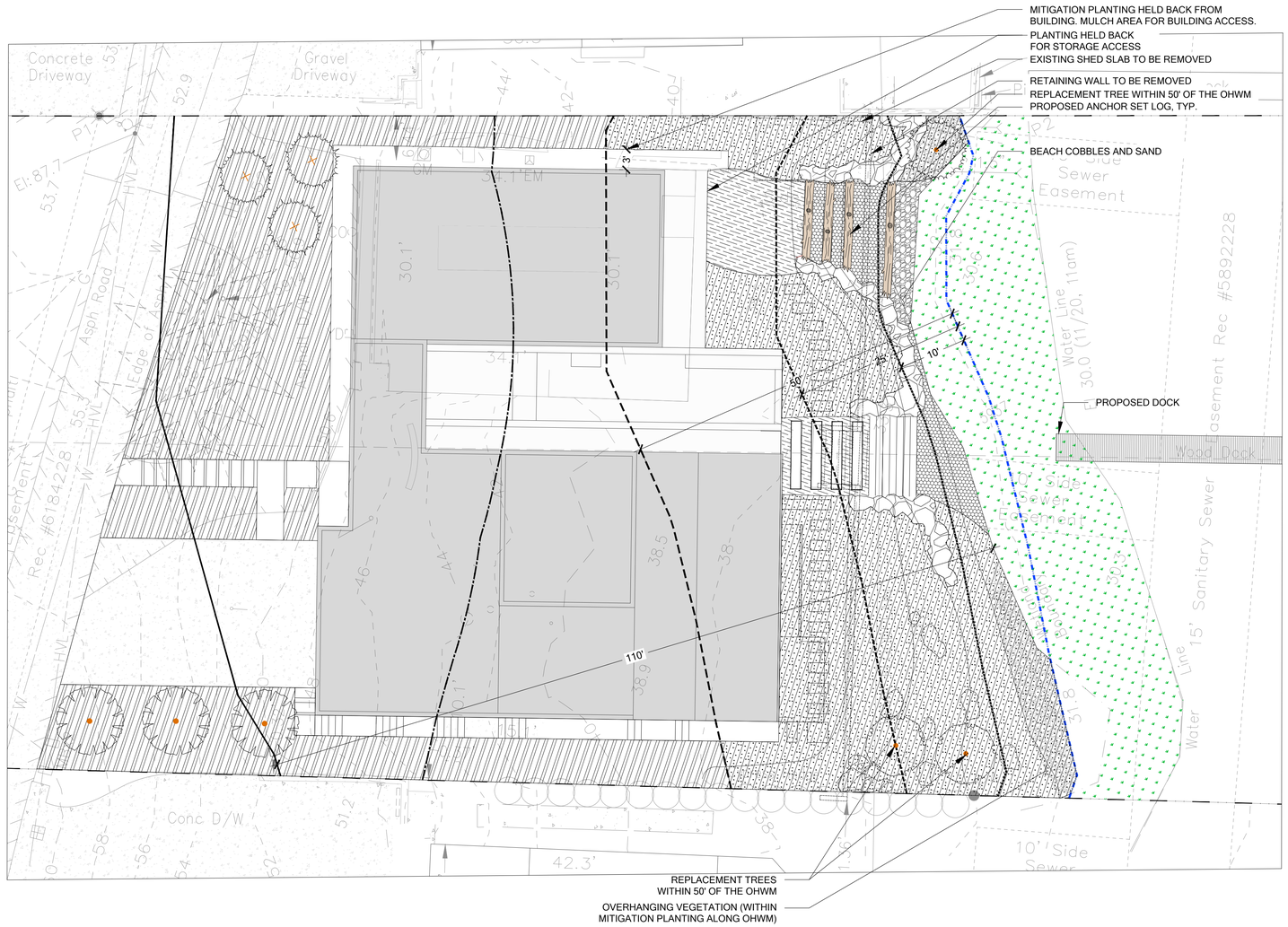

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- STEEP SLOPE - TOE OF SLOPE
- STEEP SLOPE SETBACK (75' FROM TOE OF SLOPE)

PLANT SCHEDULE

TREES	COMMON / BOTANICAL NAME	QTY	SIZE	SPACING
	SITKA SPRUCE / PICEA SITCHENSIS	3	2 GALLON	PER PLAN
	SHORE PINE / PINUS CONTORTA	1	2 GALLON	PER PLAN
	DOUGLAS FIR / PSEUDOTSUGA MENZIESII	3	2 GALLON	PER PLAN
	WESTERN RED CEDAR / THUJA PLICATA	2	2 GALLON	PER PLAN
	LAWN	291 SF		
	SHORELINE SHRUBS			
	SERVICEBERRY / AMELANCHIER ALNIFOLIA	21	1 GALLON	48" OC
	RED-OSIER DOGWOOD / CORNUS SERICEA	21	1 GALLON	48" OC
	BLACK TWINBERRY / LONICERA INVOLUCRATA	21	1 GALLON	48" OC
	SWEET GALE / MYRICA GALE	21	1 GALLON	48" OC
	MOCK ORANGE / PHILADELPHUS LEWISII	22	1 GALLON	48" OC
	PACIFIC NINEBARK / PHYSOCARPUS CAPITATUS	22	1 GALLON	48" OC
	RED-FLOWERING CURRANT / RIBES SANGUINEUM	22	1 GALLON	48" OC
	SUBALPINE SPIREA / SPIRAEA DENSIFLORA	22	1 GALLON	48" OC
	UPLAND SHRUBS			
	SERVICEBERRY / AMELANCHIER ALNIFOLIA	26	1 GALLON	48" OC
	MOCK ORANGE / PHILADELPHUS LEWISII	25	1 GALLON	48" OC
	PACIFIC NINEBARK / PHYSOCARPUS CAPITATUS	25	1 GALLON	48" OC
	RED-FLOWERING CURRANT / RIBES SANGUINEUM	25	1 GALLON	48" OC
	CLUSTERED WILD ROSE / ROSA PISOCARPA	25	1 GALLON	48" OC
	SNOWBERRY / SYMPHORICARPOS ALBUS	25	1 GALLON	48" OC
	EVERGREEN HUCKLEBERRY / VACCINIUM OVATUM	25	1 GALLON	48" OC
	SHORELINE GROUNDCOVERS			
	NODDING ONION / ALLIUM CERNUUM	47	1 GALLON	24" OC
	WESTERN COLUMBINE / AQUILEGIA FORMOSA	47	1 GALLON	24" OC
	LADY FERN / ATHYRIUM FILIX-FEMINA	47	1 GALLON	24" OC
	WESTERN LARKSPUR / DELPHINIUM MENZIESII	47	1 GALLON	24" OC
	TUFTED HAIRGRASS / DESCHAMPSIA CESPITOSA	47	1 GALLON	24" OC
	ROEMER'S FESCUE / FESTUCA IDAHOENSIS	47	1 GALLON	24" OC
	BEACH STRAWBERRY / FRAGARIA CHILOENSIS	47	4" POT	15" OC
	OREGON IRIS / IRIS TENAX	47	1 GALLON	24" OC
	DWARF CHECKERBLOOM / SIDALCEA MALVIFLORA	45	1 GALLON	24" OC
	BLUE-EYED GRASS / SISYRINCHIUM IDAHOENSE	45	4" POT	15" OC
	YELLOW-EYED GRASS / SISYRINCHIUM CALIFORNICUM	45	4" POT	15" OC
	UPLAND GROUNDCOVERS			
	KINNIKINNICK / ARCTOSTAPHYLOS UVA-URSI	43	1 GALLON	24" OC
	DEER FERN / BLECHNUM SPICANT	43	1 GALLON	24" OC
	TUFTED HAIR GRASS / DESCHAMPSIA CESPITOSA	43	1 GALLON	24" OC
	BLEEDING HEART / DICENTRA FORMOSA	43	1 GALLON	24" OC
	WOODLAND STRAWBERRY / FRAGARIA VESCA	43	1 GALLON	24" OC
	SALAL / GAULTHERIA SHALLON	43	1 GALLON	24" OC
	TIGER LILY / LILIUM COLUMBIANUM	44	4" POT	15" OC
	BIGLEAF LUPINE / LUPINUS POLYPHYLLUS	44	1 GALLON	24" OC
	LOW OREGON-GRAPE / MAHONIA NERVOSA	44	1 GALLON	24" OC
	WOOD SORREL / OXALIS OREGANA	44	4" POT	15" OC
	SWORD FERN / POLYSTICHUM MUNITUM	44	1 GALLON	24" OC
	MEADOW CHECKERBLOOM / SIDALCEA CAMPESTRIS	44	1 GALLON	24" OC

PLANTING PLAN AND SCHEDULE

SCALE 1:10

0' 5' 10' 20' 40'

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PLANT INSTALLATION SPECIFICATIONS

GENERAL NOTES

QUALITY ASSURANCE
1. PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL.
2. PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF).
3. TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUN SCALD WILL BE REJECTED.
4. NOMENCLATURE: PLANT NAMES SHALL CONFORM TO FLORA OF THE PACIFIC NORTHWEST BY HITCHCOCK AND CRONQUIST, UNIVERSITY OF WASHINGTON PRESS, 2018 AND/OR TO A FIELD GUIDE TO THE COMMON WETLAND PLANTS OF WESTERN WASHINGTON & NORTHWESTERN OREGON, ED. SARAH SPEAR COOKE, SEATTLE AUDUBON SOCIETY, 1997.

DEFINITIONS
1. PLANTS/PLANT MATERIALS. PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS; LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC..; SPRIGS, PLUGS, AND LINERS.
2. CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
2. SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE RESTORATION CONSULTANT.
3. IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
4. SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION
1. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE RESTORATION CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
2. PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
3. THE RESTORATION CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE RESTORATION CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENT OF PLANTS
1. PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
2. HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
3. WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.).

SUBMITTALS

PROPOSED PLANT SOURCES
1. WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES
1. PLANT MATERIALS LIST - SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION.
2. HAVE COPIES OF VENDOR'S OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SCIENTIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED).

DELIVERY, HANDLING, & STORAGE

NOTIFICATION
CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS
1. TRANSPORTATION - DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
2. SCHEDULING AND STORAGE - PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR.
3. HANDLING - PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL, BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
4. LABELS - PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY
PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

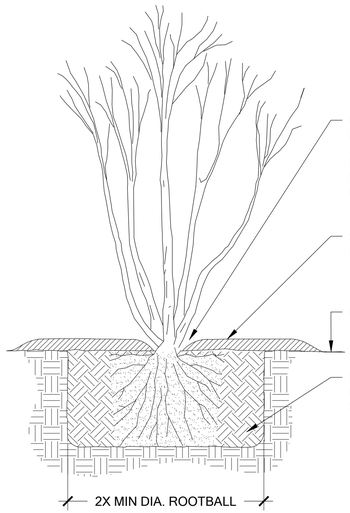
REPLACEMENT
1. PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS AT THE CONSULTANT'S DISCRETION MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
2. PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PLANT MATERIAL

GENERAL
1. PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
2. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

QUANTITIES
SEE PLANT LIST ON ACCOMPANYING PLANS AND PLANT SCHEDULES.

ROOT TREATMENT
1. CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
2. PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
3. ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.



NOTES:
1. PLANTING PIT SHALL NOT BE LESS THAN (2) TIMES THE WIDTH OF THE ROOT BALL DIA.
2. LOOSEN SIDES AND BOTTOMS OF PLANTING PIT
3. SOAK PLANTING PIT AFTER PLANTING

REMOVE FROM POT OR BURLAP & ROUGH-UP ROOT BALL BEFORE INSTALLING. UNTANGLE AND STRAIGHTEN CIRCLING ROOTS - PRUNE IF NECESSARY. IF PLANT IS EXCEPTIONALLY ROOT-BOUND, DO NOT PLANT AND RETURN TO NURSERY FOR AN ACCEPTABLE ALTERNATIVE

SPECIFIED MULCH LAYER. HOLD BACK MULCH FROM TRUNK/STEMS

FINISH GRADE

REMOVE DEBRIS AND LARGE ROCKS FROM PLANTING PIT AND SCARIFY SIDES AND BASE. BACKFILL WITH SPECIFIED SOIL. FIRM UP SOIL AROUND PLANT.

1 CONTAINER PLANTING DETAIL

Scale: NTS

PLANTING SPECIFICATIONS AND DETAILS

SCALE AS NOTED

PERMIT SET - NOT FOR CONSTRUCTION

THE WATERSHED COMPANY
750 Sixth Street South
Kirkland WA 98033
p 425.822.5242
www.watershedco.com
Science & Design

NEIL MITIGATION PLAN
BUILDING PERMIT SET
PREPARED FOR MIKE NEIL
PARCEL # 7430500180
1440 W LAKE SAMMAMISH PKWY NE
BELLEVUE, WA 98008

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
1	02-11-20	CALUP	GM

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER:
DESIGNED:
DRAFTED:
CHECKED:
JOB NUMBER:
190502
SHEET NUMBER:
W6 OF 7

FILENAME
PRINTED BY
DATE

MITIGATION PLAN NOTES

THE PROPOSED MITIGATION PLAN SEEKS TO ENHANCE PORTIONS OF THE ON-SITE CRITICAL AREA BUFFERS SHORELINE SETBACK IN ACCORDANCE WITH BELLEVUE LAND USE CODE CHAPTER 20.25E.060.D - MITIGATION REQUIREMENTS AND SEQUENCING. PURSUANT TO LUC 20.25E.065.F.8.C.IV, 75 SQUARE FEET OF NATIVE VEGETATION WILL BE PLANTED WITHIN 0-10 FEET OF THE OHWM. TO FULFILL THE REQUIREMENTS OF SHORELINE MITIGATION OUTLINED IN LUC 20.25E.065.F.8.C, 2,336 SQUARE FEET OF NATIVE PLANTINGS WILL BE ESTABLISHED WITHIN THE 50' SHORELINE SETBACK. SITEWIDE MITIGATION AREA EQUALS 4,794 SQUARE FEET. SPECIES INCORPORATED IN THE NATIVE PLANT PLAN INCLUDE (NOT LIMITED TO): SHORE PINE, DOUGLAS FIR, SALIX LUCIDA, PHYSOCARPUS CAPITATUS, VACCINIUM OVATUM, POLYSTICHUM MUNITUM, AND ARCTOSTAPHYLOS UVA-URSI.

MAINTENANCE AND MONITORING PLAN

THE SITE SHALL BE MAINTAINED AND MONITORED FOR FIVE YEARS FOLLOWING SUCCESSFUL INSTALLATION. COMPONENTS OF THE 5-YEAR MAINTENANCE AND MONITORING PLAN ARE DETAILED BELOW.

GOALS:

1. ESTABLISH DENSE NATIVE VEGETATION THAT IS APPROPRIATE TO THE ECO-REGION AND SITE.
2. LIMIT INVASIVE AND/OR NOXIOUS WEED COVER ON-SITE.
3. INCREASE OVERHANGING NATIVE VEGETATION ON LAKE SAMMAMISH.
4. PROVIDE PERCHING, NESTING AND FORAGING HABITAT FOR NATIVE BIRDS.

PERFORMANCE STANDARDS

THE STANDARDS LISTED BELOW WILL BE USED TO JUDGE THE SUCCESS OF THE INSTALLATION OVER TIME. IF PERFORMANCE STANDARDS ARE MET AT THE END OF YEAR 5, THE SITE WILL THEN BE DEEMED SUCCESSFUL AND THE PERFORMANCE SECURITY BOND WILL BE ELIGIBLE FOR RELEASE BY THE CITY OF BELLEVUE.

1. SURVIVAL:
   a. ACHIEVE 100% SURVIVAL OF INSTALLED PLANTS BY THE END OF YEAR 1. THIS STANDARD CAN BE MET THROUGH PLANT ESTABLISHMENT OR THROUGH REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.
   b. ACHIEVE 80% SURVIVAL OF ALL PLANTED TREES AND SHRUBS IN YEARS 2 THROUGH 5 AFTER PLANTING. THIS STANDARD CAN BE MET THROUGH PLANT ESTABLISHMENT OR THROUGH REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.
2. NATIVE PLANT COVER:
   a. ACHIEVE OVERALL 80% AREA COVERAGE OF NATIVE VEGETATION BY YEAR 5.
   b. DEMONSTRATE A MINIMUM COMBINED 5-YEAR TREE AND SHRUB COVERAGE OF 60%.
   c. NATIVE, OVERHANGING VEGETATION (0-10 FEET FROM OHWM): PACIFIC WILLOW AND DOGWOOD SHALL COMPOSE AT LEAST 80% OF THE TOTAL PLANTED AREA BASED ON COVERAGE BY YEAR 5.
3. INVASIVE COVER: AERIAL COVER FOR ALL NON-NATIVE, INVASIVE AND NOXIOUS WEEDS WILL NOT EXCEED 10% AT ANY YEAR DURING THE MONITORING PERIOD. INVASIVE PLANTS INCLUDE BUT ARE NOT LIMITED TO HIMALAYAN BLACKBERRY (RUBUS ARMENIACUS), CUT LEAF BLACKBERRY (RUBUS LACINIATUS) KNOTWEEDS (POLYGONUM CUSPIDATUM AND OTHERS), REED CANARY GRASS (PHALARIS ARUNDINACEA), CHERRY (HEDGE) LAUREL (PRUNUS LAUROCERASUS), ENGLISH HOLLY (ILEX AQUIFOLIUM), AND IVY SPECIES (HEDERA SPP.)

MONITORING METHODS

THIS MONITORING PROGRAM IS DESIGNED TO TRACK THE SUCCESS OF THE MITIGATION SITE OVER TIME AND TO MEASURE THE DEGREE TO WHICH THE SITE IS MEETING THE PERFORMANCE STANDARDS OUTLINED IN THE PRECEDING SECTION.

AN AS-BUILT PLAN WILL BE PREPARED BY THE RESTORATION PROFESSIONAL PRIOR TO THE BEGINNING OF THE MONITORING PERIOD. THE AS-BUILT PLAN WILL BE A MARK-UP OF THE PLANTING PLANS INCLUDED IN THIS PLAN SET. THE AS-BUILT PLAN WILL DOCUMENT ANY DEPARTURES IN PLANT PLACEMENT OR OTHER COMPONENTS FROM THE PROPOSED PLAN.

MONITORING WILL TAKE PLACE ONCE ANNUALLY IN THE FALL FOR FIVE YEARS. YEAR-1 MONITORING WILL COMMENCE IN THE FIRST FALL SUBSEQUENT TO INSTALLATION. THE FORMAL MONITORING VISIT SHALL RECORD AND REPORT THE FOLLOWING IN AN ANNUAL REPORT SUBMITTED TO THE CITY OF BELLEVUE:

1. VISUAL ASSESSMENT OF THE OVERALL SITE.
2. YEAR-1 COUNTS OF LIVE AND DEAD PLANTS BY SPECIES. YEAR-2 THROUGH YEAR-5 COUNTS OF ESTABLISHED NATIVE TREES AND SHRUBS BY SPECIES, TO THE EXTENT FEASIBLE.
3. COUNTS OF DEAD PLANTS WHERE MORTALITY IS SIGNIFICANT IN ANY MONITORING YEAR.
4. ESTIMATE OF NATIVE COVER IN THE MITIGATION AREA.
5. ESTIMATE OF NON-NATIVE, INVASIVE WEED COVER IN THE MITIGATION AREA.
6. TABULATION OF ESTABLISHED NATIVE SPECIES, INCLUDING BOTH PLANTED AND VOLUNTEER SPECIES
7. PHOTOGRAPHIC DOCUMENTATION FROM AT LEAST THREE FIXED REFERENCE POINTS.
8. ANY INTRUSIONS INTO OR CLEARING OF THE PLANTING AREAS, VANDALISM, OR OTHER ACTIONS THAT IMPAIR THE INTENDED FUNCTIONS OF THE MITIGATION AREA.
9. RECOMMENDATIONS FOR MAINTENANCE OR REPAIR OF ANY PORTION OF THE MITIGATION AREA.

MAINTENANCE

THE SITE WILL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING INSTRUCTIONS FOR AT LEAST FIVE YEARS FOLLOWING COMPLETION OF CONSTRUCTION:

1. FOLLOW THE RECOMMENDATIONS NOTED IN THE PREVIOUS MONITORING SITE VISIT.
2. GENERAL WEEDING FOR ALL PLANTED AREAS:
   a. AT LEAST TWICE YEARLY, REMOVE ALL COMPETING WEEDS AND WEED ROOTS FROM BENEATH EACH INSTALLED PLANT AND ANY DESIRABLE VOLUNTEER VEGETATION TO A DISTANCE OF 18 INCHES FROM THE MAIN PLANT STEM. WEEDING SHOULD OCCUR AT LEAST TWICE DURING THE SPRING AND SUMMER. FREQUENT WEEDING WILL RESULT IN LOWER MORTALITY, LOWER PLANT REPLACEMENT COSTS, AND INCREASED LIKELIHOOD THAT THE PLAN MEETS PERFORMANCE STANDARDS BY YEAR-5.
   b. MORE FREQUENT WEEDING MAY BE NECESSARY DEPENDING ON WEED CONDITIONS THAT DEVELOP AFTER PLANT INSTALLATION.
   c. DO NOT WEED THE AREA NEAR THE PLANT BASES WITH STRING TRIMMER (WEED WHACKER/WEED EATER). NATIVE PLANTS ARE EASILY DAMAGED OR KILLED, AND WEEDS EASILY RECOVER AFTER TRIMMING.
   d. SELECTIVE APPLICATIONS OF HERBICIDE MAY BE NEEDED TO CONTROL INVASIVE WEEDS, ESPECIALLY WHEN INTERMIXED WITH NATIVE SPECIES. HERBICIDE APPLICATION, WHEN NECESSARY, SHALL BE CONDUCTED ONLY BY A STATE-LICENSED APPLICATOR.
3. APPLY SLOW-RELEASE, GRANULAR FERTILIZER TO EACH INSTALLED PLANT ANNUALLY IN THE SPRING (BY JUNE 1) OF YEAR-2 THROUGH YEAR-5.
4. REPLACE MULCH AS NECESSARY TO MAINTAIN A 4-INCH-THICK LAYER, RETAIN SOIL MOISTURE, AND LIMIT WEEDS.
5. REPLACE EACH PLANT FOUND DEAD IN THE MONITORING VISITS DURING THE UPCOMING DORMANT SEASON (OCTOBER 15 TO MARCH 1), FOR BEST SURVIVAL RESULTS.
6. THE PROPERTY OWNER WILL ENSURE THAT WATER IS PROVIDED FOR THE ENTIRE PLANTED AREA WITH A MINIMUM OF 1 INCH OF WATER PER WEEK FROM JUNE 1 THROUGH SEPTEMBER 30 FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, THROUGH HAND-WATERING OR THE OPERATION OF A TEMPORARY OR PERMANENT IRRIGATION SYSTEM. LESS WATER IS NEEDED FROM JANUARY THROUGH MAY AND OCTOBER THROUGH DECEMBER.
7. PROPERTY OWNER WILL ENSURE THAT LOGS AND LOG ANCHORS ARE IN PLACE.

GENERAL WORK SEQUENCE

SITE PREPARATION

1. INSTALL EROSION CONTROL MEASURES PER PLANS OR USE ADDITIONAL BEST MANAGEMENT PRACTICES AS NEEDED.
2. MANUALLY CLEAR LAWN AND ORNAMENTAL VEGETATION FROM MITIGATION AREA DURING SPRING AND/OR SUMMER MONTHS (I.E., AVOID CREATING EXPOSED SOIL CONDITIONS DURING THE WINTER STORM SEASON).
   a. REMOVE INVASIVE SPECIES (I.E., HIMALAYAN BLACKBERRY, ENGLISH IVY) THAT MAY BE PRESENT, IN ACCORDANCE WITH KING COUNTY NOXIOUS WEED BEST MANAGEMENT PRACTICES. FOR MORE INFORMATION: *HTTPS://KINGCOUNTY.GOV/SERVICES/ENVIRONMENT/ANIMALS-AND-PLANTS/NOXIOUS-WEEDS.ASPX*.
   b. AVOID AND MINIMIZE DISTURBANCE AND/OR COMPACTION TO ROOTS OF ESTABLISHED NATIVE TREES TO BE RETAINED WHEN REMOVING VEGETATION FROM WITHIN TREE DRIPLINES.
3. INSTALL SITE FEATURES INCLUDING BOULDERS AND LOGS PER PLAN.
4. BLANKET-MULCH CLEARED AREAS OR RING MULCH AROUND INSTALLED AND EXISTING NATIVE PLANTS WITH WOOD MULCH, FOUR INCHES THICK.
   a. ENSURE MULCH DOES NOT TOUCH STEMS OF EXISTING (OR INSTALLED) VEGETATION. SEE PLANTING DETAIL ON SHEET W5.

MITIGATION PLANTING AND IRRIGATION

1. INSTALL MITIGATION PLANTS DURING THE DORMANT SEASON FOR BEST SURVIVAL (OCTOBER 15 - MARCH 1).
   a. PREPARE A PLANTING PIT FOR EACH PLANT THROUGH BLANKET WOOD MULCH AND INSTALL PER THE PLANTING DETAILS.
2. INSTALL A TEMPORARY OR PERMANENT, ABOVE GROUND IRRIGATION SYSTEM TO PROVIDE FULL COVERAGE TO ALL INSTALLED PLANTS WITHIN THE MITIGATION AREA. ALTERNATIVELY, THE HOMEOWNER SHALL ENSURE ADEQUATE HAND WATERING DURING DRY MONTHS.

MATERIAL SPECIFICATIONS AND DEFINITIONS

1. WOODCHIP MULCH: 9-14.4(3) BARK OR WOOD CHIPS- WSDOT STANDARD SPEC.

   BARK OR WOOD CHIP MULCH SHALL BE DERIVED FROM DOUGLAS FIR, PINE, OR HEMLOCK SPECIES. IT SHALL NOT CONTAIN RESIN, TANNIN, OR OTHER COMPOUNDS IN QUANTITIES THAT WOULD BE DETRIMENTAL TO PLANT LIFE. SAWDUST SHALL NOT BE USED AS MULCH.

   BARK OR WOOD CHIPS WHEN TESTED SHALL BE ACCORDING TO WSDOT TEST METHOD T 123 PRIOR TO PLACEMENT AND SHALL MEET THE FOLLOWING LOOSE VOLUME GRADATION:

SIEVE SIZE	PERCENT PASSING	
	MINIMUM	MAXIMUM
2″	95	100
NO. 4	0	30

   APPROX. QUANTITY REQUIRED: 60 CUBIC YARDS.

2. COMPOST: CEDAR GROVE COMPOST OR EQUIVALENT "COMPOSTED MATERIAL" PER WASHINGTON ADMIN. CODE 173-350-220. QUANTITY REQUIRED: 35 CUBIC YARDS
3. FERTILIZER: SLOW-RELEASE, PHOSPHOROUS-FREE GRANULAR FERTILIZER. MOST COMMERCIAL NURSERIES CARRY THIS PRODUCT. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR USE. KEEP FERTILIZER IN WEATHER-TIGHT CONTAINER WHILE ON-SITE. FERTILIZER IS ONLY TO BE APPLIED IN YEARS TWO AND THREE, NOT IN YEAR ONE.
4. RESTORATION SPECIALIST: QUALIFIED PROFESSIONAL ABLE TO EVALUATE AND MONITOR THE CONSTRUCTION OF ENVIRONMENTAL RESTORATION PROJECTS.
5. TOPSOIL: REQUIRED TO MEET 14" DEPTH THROUGHOUT PLANTING AREAS. AFTER TOPSOIL PLACEMENT, LEVEL WILL EXCEED FINISHED GRADES TO ALLOW FOR SETTLING; DESIRED DEPTH AFTER SETTLING IS 8-12". IMPORT TOPSOIL SHALL BE CEDAR GROVE TWO-WAY TOPSOIL OR AN APPROVED EQUIVALENT AS DETERMINED BY THE PROJECT REPRESENTATIVE TO MEET THE APPROVED EQUIVALENT REQUIREMENTS LISTED IN THIS SPECIAL PROVISION.

   APPROVED EQUIVALENT REQUIREMENTS-- CONTRACTOR MUST PROVIDE FROM THE MANUFACTURER A RECENT COPY OF A SOIL REPORT WITH A REQUIRED SAMPLE THAT IS NOT MORE THAN 6 MONTHS OLD. THE SOIL REPORT MUST DEMONSTRATE THE TOPSOIL MEETS ALL OF THE REQUIREMENTS CONTAINED HEREIN. TOPSOIL FOR PLANTING BEDS SHALL BE A MIXTURE OF APPROXIMATELY 33-50% COMPOST AND 50-65% SAND OR SANDY LOAM, EACH MEETING THE REQUIREMENTS BELOW.

   a. LOAM SHALL BE SANDY LOAM PER USDA GRADATION, MEETING THE REQUIREMENTS TABLE 2; AND BE FREE OF PHYTO-TOXIC MATERIALS, AND VIABLE SEEDS, RHIZOMES OR ROOTS OF STATE-LISTED NOXIOUS WEEDS.
   b. SAND SHALL MEET THE REQUIREMENTS IN TABLE 2; AND BE FREE OF PHYTO-TOXIC MATERIALS; VIABLE SEEDS, RHIZOMES OR ROOTS OF STATE-LISTED NOXIOUS WEEDS.
   c. MIX SHALL CONTAIN 10 TO 20% ORGANIC MATTER, BY WEIGHT (LOSS ON IGNITION).
   d. PH SHALL BE BETWEEN 6.0 AND 7.5
   e. SOLUBLE SALT CONTENTS SHALL BE LESS THAN 3.0 MMHOS/CM.
   f. APPROVED PRODUCTS INCLUDE CEDAR GROVE 2-WAY TOPSOIL.

TOPSOIL HORTICULTURAL VALUES	
MIX	SAND-COMPOST
ORGANIC MATTER DRY WT	12-18%
CONDUCTIVITY MMHS/CM	<4
PH	6.0-7.5
CEC	>10 MEQ/100G
USDA TEXTURE	LOAMY SAND
WAC METALS	PASS

6. GRAVEL: CLEAN WASHED ROUNDED GRAVEL TO BE APPROVED BY PROJECT REPRESENTATIVE
7. FERTILIZER (FOR NEAR AQUATIC ENVIRONMENTS): SLOW-RELEASE, PHOSPHOROUS-FREE GRANULAR FERTILIZER. LABEL MUST INDICATE THAT PRODUCT IS SAFE FOR AQUATIC ENVIRONMENTS. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR USE. KEEP FERTILIZER IN WEATHER-TIGHT CONTAINER WHILE ON-SITE. FERTILIZER IS ONLY TO BE APPLIED IN YEARS TWO AND THREE, NOT IN YEAR ONE.

CONTINGENCIES

IF THERE IS A SIGNIFICANT PROBLEM WITH THE MITIGATION AREAS MEETING PERFORMANCE STANDARDS, A CONTINGENCY PLAN WILL BE DEVELOPED AND IMPLEMENTED. CONTINGENCY PLANS CAN INCLUDE, BUT ARE NOT LIMITED TO: SOIL AMENDMENT, ADDITIONAL PLANT INSTALLATION, AND PLANT SUBSTITUTIONS OF TYPE, SIZE, QUANTITY, AND LOCATION.

PERMIT SET - NOT FOR CONSTRUCTION

THE WATERSHED COMPANY
750 Sixth Street South
Kirkland WA 98033
p 425.822.5242
www.watershedco.com
Science & Design

NEIL MITIGATION PLAN
BUILDING PERMIT SET
PREPARED FOR MIKE NEIL
PARCEL # 7430500180
1440 W LAKE SAMMAMISH PKWY NE
BELLEVUE, WA 98008

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
1	02-11-20	CALUP	GM

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER:
DESIGNED:
DRAFTED:
CHECKED:
JOB NUMBER:
190502
SHEET NUMBER:
W7 OF 7

FILENAME
PRINTED BY
DATE

MITIGATION NOTES

Shoreline Variance: Compliance Documentation

NEIL RESIDENCE

BELLEVUE, WA

June 2020

Prepared for:

Mike Neil
8002 Avalon Place
Mercer Island, WA 98040

The Watershed Company

Title-page image: Existing residence on the Neil property on Lake Sammamish. From the southern property boundary looking north.

THE WATERSHED COMPANY

750 Sixth Street South
Kirkland, WA 98033

p 425.822.5242
f 425.827.8136

watershedco.com

Reference Number: 190502

Contact: Alex Pittman
Environmental Planner

Table of Contents

List of Figures

List of Tables

1 Introduction

The proposed project involves the redevelopment of a shoreline parcel within the Shoreline Residential environment along Lake Sammamish in the City of Bellevue (City). The project area is comprised of a single lot which is bisected by a private access road and currently developed with a single-family residence (built in 1970). Portions of proposed improvements will occur within or adjacent to a regulated wetland and steep slope (greater than or equal to 40 percent grade), as well as within proximity to the shoreline. The steep slope area is located to the west of the access road and is characterized by native vegetation and a robust canopy of large trees. The lake-fringe wetland is located along the shoreline of Lake Sammamish.

Both the slope and wetland on-site are designated as critical areas under Bellevue Land Use Code (LUC) Part 20.25H. According to LUC 20.25H.120(B)(1)(b), steep slope critical areas require a top-of-slope buffer of 50 feet. Further, pursuant to LUC 20.25H.120(C)(2), steep slopes require a standard toe-of-slope setback of 75 feet. The lake-fringe wetland is classified as a Category II wetland with a habitat score of 5 points, and therefore requires a regulatory buffer of 110 feet, pursuant to LUC 20.25H.095(D)(1)(a)(i). A structure setback of 20 feet is required from the edge of the buffer. The footprint of the existing primary structure is excluded from the regulatory buffer and structure setbacks. The subject parcel also includes a standard 50-foot shoreline structure setback and a 50-foot shoreline vegetation conservation area (SVCA), both measured from the OHWM.

The applicant proposes to redevelop the existing residence, driveway, and garage, and to construct a new dock on Lake Sammamish. The proposed residence and associated hardscapes would be located within the standard wetland buffer and steep slope toe-of-slope setback. Some improvements will also occur within the standard shoreline structure setback and SVCA. Modification of the standard wetland buffer requires a shoreline variance. LUC 20.25E.190(C) establishes the purpose of a shoreline variance permit as follows:

The purpose of a variance to the SMP is strictly limited to granting relief to specific bulk, dimensional or performance standards set forth in the SMP where there are extraordinary or unique circumstances relating to the property such that strict implementation of the standards would impose unnecessary hardships on the applicant or thwart the policies of the SMA.

In addition to describing existing site conditions and the proposed project, this document will detail how the proposed project seeks relief from a dimensional standard of the Bellevue Shoreline Master Program (SMP) such that a strict implementation would impose an unnecessary hardship on the applicant. It will further demonstrate that the public interest will suffer no substantial detrimental effect.

LUC 20.25E.190(D) includes the specific compliance criteria for approval of a shoreline variance. Sections 2 and 3 below provide an overview of existing site conditions and a detailed project description, whereas Sections 4 and 5 provide an assessment of each criterion and document how it is met by the proposal.

2 Existing Conditions

The subject property is located at 1440 West Lake Sammamish Parkway NE (parcel #7430500180) in the City of Bellevue. Lake Sammamish borders the project area to the east, West Lake Sammamish Parkway NE borders the project area to the west, and single-family residences are located to the north and south. The parcel is bisected by the private access road, NE Rosemont Place. To the west of the access road is a steep slope, characterized by native vegetation and a robust canopy of large trees. The top of the slope is near West Lake Sammamish Parkway NE to the west, and it slopes downward toward Lake Sammamish to the east. To the east of the access road is the existing primary residential structure and appurtenant structures, including a shed, two small out-buildings set on cinder blocks, a retaining wall, and a wooden frame for a small dock. Vegetation is highly variable throughout this portion of the site. Near the residence there are large areas of mown lawn, ornamental landscaping beds, and a number of large trees. To the east of the retaining wall is a mix of native and invasive herbaceous vegetation along the shoreline of the lake.

The site is situated along the shoreline of Lake Sammamish, in the City-defined Rosemont drainage basin of the Cedar-Sammamish Watershed (WRIA 8). According to the Natural Resources Conservation Service Web Soil Survey, the site is characterized by Alderwood and Kitsap silt loam soils. Any surface or groundwater on the site would be expected to flow east toward the lake. A lake-fringe wetland along Lake Sammamish was identified on-site during field investigations.

Existing site-wide functions are summarized as follows:

Hydrologic Functions: Non-developed portions of the site to the west of the access road are vegetated with native trees and an understory of invasive English ivy. Areas closer to the residence include significant areas of lawn and ornamental landscaping. The immediate shoreline and wetland area, to the east of the retaining wall, contain a mix of native and non-native herbaceous vegetation. Vegetated (non-lawn) areas of the site are expected to intercept, allow for infiltration, and uptake rain and surface water, thereby functioning well to both filter water and reduce the quantity of water flowing down-gradient. Overall, the site provides moderate hydrologic functions.

Habitat and Vegetative Functions: Vegetation, whether located within or outside of critical areas, inherently provides some habitat functions. To the west of the access road is a steep slope, characterized by a robust canopy of large trees. A total of fifty-eight (58) significant trees are found in this area. This area is also infested with invasive English ivy, which covers most of the hillside and is growing on many of the trees on the slope. Western red cedar, big-leaf maple, and Douglas-fir are the most abundant tree species on-site. Vegetation to the east of NE Rosemont Place is more variable. To the east of the access road is the existing primary residential structure and appurtenant structures, including a shed, two small out-buildings set on cinder blocks, a retaining wall, and a wooden frame for a small dock. Vegetation is highly variable throughout this portion of the site. Near the residence there are large areas of mown lawn, bare ground, ornamental landscaping beds, and a number of large trees. To the east of the retaining wall is a mix of native and invasive herbaceous vegetation along the shoreline of the lake, including horsetail, reed canarygrass, and bulrush. Overall, the site provides moderate vegetative and habitat functions.

Slope Functions: When located on slopes, vegetation can function to prevent soil erosion and improve slope stability. During heavy rain events, live vegetation and dead plant parts (e.g., dead stems, branches, leaves, etc.) prevent concentrated and potentially erosive flows from developing on steep slopes through rainwater interception. Vegetation growing on slopes also has the opportunity to provide slope stability through establishment of deep, inter-woven plant roots. Most native trees, shrubs, and groundcover plants perform this function well, while shallow-rooted weeds like Himalayan blackberry and English ivy, do not. Overall, the site provides moderate to high slope stability functions.

3 Project Description

The proposed project involves redevelopment of the residential parcel by removing the existing outdated single-family residence and appurtenances and constructing a modern single-family residence. The existing concrete retaining wall to the east of the house will be partially replaced with sections of stone stairs and wall, and completely removed in other areas, increasing the area of natural gradient from the shoreline of Lake Sammamish. The existing driveway will be reconfigured and reduced in size to provide access to the updated garage entry point. The proposed residence will encompass the footprint of the existing residence and will extend further to the south and east of the existing residence. The closest point of the residence will extend to within approximately 25 feet of the OHWM.

The proposed residential redevelopment includes a single-family residence with an attached garage. Based upon the needs of the project applicant and the character and scale of the surrounding neighborhood, which includes large residences situated along the shoreline of

Lake Sammamish and at the toe of the steep slope, the architectural design for the project proposes to utilize the full extent of the existing footprint. Expansion of the footprint westward is limited by the presence of NE Rosemont Place and the steep slope, and expansion northward is limited by the property boundaries. As such, expansion is proposed southward and eastward, in accordance with shoreline setback/SVCA regulations.

A new dock will also be constructed to facilitate recreation within Lake Sammamish in accordance with the dimensional standards identified in LUC 20.25E.065(H)(a). The total area of the dock will be 455 SF, with a length of 70 feet and a walkway width of 4 feet within 30 feet of the OHWM. Approximately 40 feet waterward the OHWM, the walkway width is expanded to 6 feet. One boat lift and one jetski lift are proposed. One ell is included on the dock, approximately 44 feet waterward of the OHWM.

Unavoidable impacts to wetland and steep slope critical area buffers/setbacks will occur through site development. Permanent impacts, totaling 6,668 SF, are proposed to the wetland buffer and steep slope setback on-site. Of these impacts, a total of 5,558 SF occur within the wetland buffer, and a total of 2,661 SF occur within the standard steep slope setback. This compares to impacts associated with existing site conditions of 3,151 SF sitewide, including 2,954 SF of impacts within the wetland buffer and 1,807 SF of impacts within the steep slope setback. Therefore, the proposed project will result in a net increase of 3,517 SF of sitewide impacts, including a net increase of 3,251 SF of wetland buffer impacts and 854 SF of steep slope setback impacts. A total of eleven (11) significant trees will be removed from critical area buffers/setbacks as part of proposed activities. In addition, the residence will encroach within both the standard shoreline structure setback and SVCA.

To compensate for these impacts, on-site mitigation is proposed. Extensive native plantings will be added throughout remaining areas of the shoreline setback/SVCA, wetland buffer, and steep slope setback, including areas directly adjacent to the shoreline. The existing upland retaining wall will be partially removed in order to re-establish a more natural gradient and plant community along the shoreline. Plantings will replace existing non-native and invasive species on-site and will help to ensure the project results in no net loss of shoreline ecological functions. A total of 4,794 square feet of native plantings are proposed within shoreline jurisdiction.

4 LUC 20.25E.190.D.1

The City may approve or approve with modifications an application for a shoreline variance to the SMP if:

Compliance with each of the criteria found in this code subsection is demonstrated below.

4.1 LUC 20.25E.190.D.1.a

Denial of the variance would result in thwarting the policy of RCW 90.58.020;

Lake-fringe wetlands are expected to occur regularly on the shoreline of Lake Sammamish, particularly in areas where the shoreline has not been previously armored. As such redevelopment and expansion on many parcels in the area, where lake-fringe wetlands are likely to occur and residential structures currently exist near the shoreline, would require modifications to the standard wetland buffer regulations, necessitating approval of a shoreline variance. The total of these variances would remain consistent with RCW 90.58.020 in that such cumulative impacts would:

Be undertaken as part of a priority use;

Alterations for single-family residences are afforded priority use by RCW 90.58.020.

Be allowed under recognition of the protection of private property rights;

Each of the individual parcels is afforded private property rights under various local, state, and federal statutes, as recognized by RCW 90.58.020.

Be approved consistent with control of pollution;

Development of any of the shoreline parcels will require compliance with the most current edition of the City of Bellevue's Storm and Surface Water Engineering Standards. This document sets standards and regulations to control runoff and maintain water quality.

Protect generally public rights of navigation;

In-water work, including dock installation on the subject parcel, would require compliance with LUC 20.25E.065(H) – *Residential Moorage*. These regulations include standards intended to protect navigation. In addition, work below the OHWM would require compliance with Section 10 of the Rivers and Harbors Act of 1899. This law, enforced by the U.S. Army Corps of Engineers, is intended to ensure that there are no impacts to navigation. Therefore, public rights of navigation will be protected.

Protect against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life;

Variances granted for development within a standard wetland buffer, or within the standard shoreline setback and shoreline vegetation conservation area, on any of the

other shoreline parcels in the area will require mitigation measures to ensure that there is no net loss of shoreline function. Each parcel would individually be required to follow mitigation sequencing and would have to prove the ability to achieve no net loss in function through restoration or enhancement of degraded shoreline areas and/or preservation of the most highly functioning areas.

Additionally, vegetation conservation standards for shoreline residential development are specified in LUC 20.25E.065(F) and aim to protect the overall health and sustainability of the shoreline. Protection along the shoreline is generally provided through minimization of adverse water quality impacts and habitat loss related to vegetation removal.

Additional state and federal regulations will help to significantly reduce the potential for cumulative impacts to the shoreline. This includes the Endangered Species Act, the Clean Water Act, the State Hydraulic Code, and the National Pollutant Discharge Elimination System.

A concurrent Cumulative Impacts Analysis was prepared during the City's SMP update process and concluded that although additional development would occur along this reach of shoreline, the net effect of development combined with the standards prescribed by the SMP, other regulations, and mitigation efforts would prevent a net loss in shoreline ecological functions.

As demonstrated above, the cumulative impacts of similar shoreline variance requests in the area would remain consistent with the policies of RCW 90.58.020. If granted to other properties within the vicinity, additional variances would not result in adverse impacts to the shoreline environment.

4.2 LUC 20.25E.190.D.1.b

The applicant has demonstrated extraordinary circumstances and the public interest will suffer no substantial detrimental effect;

Extraordinary circumstances on-site result in the inability to construct a reasonably sized residence consistent with current design standards on a shoreline property. These circumstances stem from the following unique conditions and site parameters:

- The site includes natural features – a lake-fringe wetland and steep slope – with standard buffers/setbacks of 110 feet and 75 feet, respectively.
- The presence of the lake-fringe wetland, steep slope area, and their associated buffers/setbacks on the subject parcel eliminates any additional developable area on the subject property (the footprint of the existing vacant, outdated residential structure is not considered to be part of the buffer/setback).

It is the unique conditions described above combined with the strict application of the SMP (the inability to modify the standard wetland buffer to less than 110 feet without a shoreline variance) that results in the extraordinary circumstance that is the elimination of additional developable area on-site.

The proposed project includes the redevelopment of an existing outdated and vacant single-family residential structure. Other existing dilapidated structures, including multiple outbuildings set on cinder blocks, which may pose a threat to safety or a risk for squatting and trespassing, and the existing dock, will be removed. Development of the site will also involve the removal of on-site invasive species and an improvement to shoreline functions through the partial removal of the existing upland retaining wall, regrading to a more natural shoreline gradient, and the addition of native plantings within the shoreline setback/SVCA, wetland buffer, and steep slope setback.

While portions of the proposed redevelopment will occur within the standard steep slope setback, this development will occur in areas which have previously been modified. As such, additional development in these areas is not expected to impact slope stability or increase the risk of hazards associated with the slope. Furthermore, the project has been developed in coordination with a geotechnical expert (Geotechnical Consultants, Inc.) to ensure slope stability is maintained or improved.

The public interest will also suffer no detrimental effect as a result of the proposed development within the standard wetland buffer. The project fully complies with the City's SMP regulations for redevelopment along the shoreline, as well as with the City's critical areas report process for deviating from standard application of critical areas regulations, in order to allow for additional development within the standard wetland buffer. The City's critical areas report process, though unable to authorize wetland buffer modifications within shoreline jurisdiction, is based on best available science and is consistent with Ecology's guidance for the protection of wetland and wetland buffer functions and values. Additionally, the proposed project includes mitigation for wetland buffer impacts at a greater than 1:1 ratio, as required by the City's critical areas regulations. This approach is consistent with the intent of the SMA and Bellevue SMP to allow single-family residential development while ensuring no net loss of shoreline functions and values.

Because sewer, water, electricity, and street access are already provided to the subject parcel, there will be no additional burden to the public from redevelopment of the single-family residence on-site. Leaving the parcel in its existing degraded condition would not further the interests of the public because the shoreline and wetland buffer would not be further enhanced, and restoration of shoreline functions would not be accomplished. In addition, as demonstrated in Section 4.5.1 below, the proposed development will fit in with surrounding developed land

uses within the immediate vicinity. Therefore, no substantial detrimental effect to the public interest will result from the proposed project.

4.3 LUC 20.25E.190.D.1.c

The strict application of the bulk, dimensional, or performance standards of the SMP preclude, or significantly interferes with, reasonable use of the property;

Compliance with this criterion has been broken down into two primary subsections: 1) standards set forth in the master program; and 2) preclusion of reasonable use of the property.

4.3.1 Standards Set Forth in the Master Program

4.3.1.1 *Shoreline Master Program Regulations*

Work within 200 feet of the ordinary high-water mark (OHWM) of Lake Sammamish is subject to the standards and provisions of LUC 20.25E. The subject parcel is located within the Shoreline Residential environment designation and includes a standard 50-foot shoreline structure setback, measured from the OHWM. Additionally, the site includes a 50-foot shoreline vegetation conservation area (SVCA), also measured from the OHWM. Any significant trees removed within 50 feet of the OHWM require replacement pursuant to LUC 20.25E.065(F)(8)(b) and LUC 20.25E.065(F)(8)(c)(iii).

Dimensional standards for the development of new residential docks are provided in LUC 20.25E.065(H)(a). These standards limit the total area for docks on Lake Sammamish to 480 SF, the maximum length to 150 feet, and the width to 4 feet within 30 feet of the OHWM and 6 feet beyond 30 feet of the OHWM. Ells are allowed 30 feet waterward of the OWHM. Docks may include up to four boat or watercraft lifts and one open-side structural boat moorage cover.

The shoreline structure setback can be reduced to a minimum of 25 feet, subject to the provisions of LUC 20.25E.065(F). Impacts within the SVCA must be calculated and offset pursuant to the debit/credit system outlined in LUC 20.25E.065(F)(8).

4.3.1.2 *Shoreline Critical Areas Regulations*

Critical areas in Bellevue's shoreline jurisdiction are regulated by the standards and provisions of LUC 20.25H. The footprint of the existing primary structure is excluded from being within critical areas, buffers, or setbacks [LUC 20.25H.035(B)]. Impacts within critical areas, buffers, and/or setbacks are also subject to the mitigation sequencing criteria of LUC 20.25H.215.

Steep Slopes

In Bellevue, steep slope critical areas are regulated in Part 20.25H (Critical Areas Overlay District) of the LUC. According to LUC 20.25H.120(A)(2), slopes of 40 percent or more that have

a rise of at least 10 feet and exceed 1,000 square feet in area are designated as geologic hazard areas and therefore subject to the regulations of LUC 20.25H.120 through 20.25H.145. According to LUC 20.25H.120(B)(1)(b), steep slope critical areas require a top-of-slope buffer of 50 feet. Further, pursuant to LUC 20.25H.120(C)(2), steep slopes require a toe-of-slope setback of 75 feet. A large portion of the subject property is encumbered by steep slopes and/or buffers and setbacks.

Wetlands

Wetlands in shoreline jurisdiction are regulated under Part 20.25H (Critical Areas Overlay District) of the LUC. The lake-fringe wetland is classified as a Category II wetland with a habitat score of 5 points, and therefore requires a standard regulatory buffer of 110 feet. A structure setback of 20 feet is required from the edge of the buffer. The footprint of the existing primary structure is excluded from the regulatory wetland buffer and structure setback. Impacts to wetland buffers are subject to a mitigation ratio of one-to-one.

Outside of shoreline jurisdiction, critical areas standards for wetlands and their associated buffers/setbacks can only be modified through an approved critical areas report. Within shoreline jurisdiction, the critical areas report process does not apply for wetland buffers and modification of the standard wetland buffer requires a shoreline variance. In both cases, the applicant must demonstrate that the modifications to the critical area, buffer, and setback, combined with any restoration efforts, will result in equivalent or better protection of critical area functions and values than would result from adhering to the standard application of the regulations. Restoration activities would require monitoring and maintenance in accordance with LUC 20.25H.220, consistent with an approved restoration plan.

4.3.2 Reasonable Use

As detailed above, the project site includes the following:

- 50-foot standard shoreline setback;
    - Ability to reduce the shoreline setback to 25 feet without a shoreline variance;
- 50-foot shoreline vegetation conservation area;
- Lake-fringe wetland and associated 110-foot wetland buffer and 20-foot structure setback;
- Steep slope and associated 75-foot steep slope toe-of-slope setback; and
- Front and interior yard zoning setbacks.

The subject parcel is constrained with multiple buffers and setbacks, such that the strict application of the SMP, including shoreline critical areas regulations, effectively eliminates any

additional developable area on the parcel outside of the footprint of the existing primary residential structure, which is excluded from critical area buffers/setbacks.

Based upon the needs of the project applicant and the character and scale of the surrounding neighborhood, this elimination of additional developable area precludes 'reasonable use' of the property. As such, the below discussion will establish how the notion of 'reasonable' has changed over time and how the proposed project will result in a reasonable use of the parcel.

Parcels in the vicinity of the subject parcel were generally first developed prior to 1960. At the time of development for these parcels, it is presumed that regulatory restrictions would not have prevented property owners from building within the buffers of lake-fringe wetlands along the shoreline of Lake Sammamish (they wouldn't have been designated as having a regulatory buffer at the time). Rather, construction costs and steep slope/access issues would have been the primary factor limiting the size and location of shoreline residential development.

Over time, an increase in the number of homebuyers with large budgets has increased shoreline property values dramatically. According to Zillow.com[1], in 1996, the median value of waterfront properties was 64 percent more than the median value of all homes. In 2014, the difference had grown to 116 percent. More specific to the project area, in 2014, Zillow estimated the median value of non-waterfront residences in Bellevue at $652k, while waterfront residences were estimated at $2.0 million.

The increase in owner budgets and property values in general allows for more money to be spent on shoreline properties, such that increased design and construction costs present less of a barrier. However, despite these increases, the regulatory atmosphere along the shoreline has changed. While property owners decades ago made their decisions based upon design and cost constraints, owners today must consider regulatory constraints, as well, as is evidenced by the requirement for a shoreline variance to develop within lake-fringe wetland buffers along the shoreline. It is this change in constraints and shoreline property owner tendencies over time that results in a concurrent change in what shall be deemed reasonable.

Additionally, the presence of a lake-fringe wetland along the shoreline results from the fact that the shoreline of the subject property has not been armored, as it has been on many neighboring parcels. These alterations of the shoreline have undoubtably eliminated many lake-fringe wetlands from the shoreline of Lake Sammamish as the shoreline has been developed over time, as most shoreline parcels would have been initially developed prior to the implementation of shoreline and wetland regulations. It is expected that these wetland features would have been extremely common along the shoreline prior to these modifications. In essence, the lack of

[1] https://www.zillow.com/research/what-is-waterfront-worth-7540/

previous impacts on the shoreline has created a situation where the project applicant now faces greater regulatory constraints on additional shoreline development than exists on neighboring parcels with greater existing shoreline impacts. Since the initial development of these areas, the SMA and associated local shoreline regulations have been developed to simultaneously allow for the development of the shoreline with preferred uses, including single-family residential development, while ensuring no net loss of ecological function of the shoreline. The project fully complies with the City's SMP regulations for redevelopment along the shoreline, as well as with the City's critical areas report process for deviating from standard application of critical areas regulations, in order to allow for additional development within the standard wetland buffer (though this process is only available to an applicant outside of shoreline jurisdiction).

The preclusion of 'reasonable use' of a parcel dates to the original variance criteria found in the Shoreline Management Act of 1971 (SMA). However, the term 'reasonable use' or 'reasonable' is not defined by the SMP, the SMA, or within WAC 173-26 or RCW 90.58. Merriam-Webster defines the word 'reasonable' as 'moderate, fair' and 'not extreme or excessive'. In addition, the term has been the subject of several Shoreline Hearings Board (SHB) cases, including:

- Garrett v. Ecology (2005):

  The determination of whether strict application of a shoreline plan precludes or interferes with "reasonable use" of property is always a fact-specific inquiry that examines a number of factors. The Board will look at the uses of adjacent and nearby lots, the reasonable expectations of the owners, and the unique attributes of the lot.

- Buechel v. Ecology (1994):

  The size, location, and physical attributes of a piece of property are relevant when deciding what is a reasonable use of a particular parcel of land.

Just as design and construction capabilities and budgetary constraints have changed in the preceding decades, so has the perception of what is 'reasonable' within a shoreline setting. The project area was initially developed 50-100 years ago, with residences situated at the toe of the steep slope, along the shoreline of Lake Sammamish. As shoreline property values have increased and the budgets of shorelines property owners have increased, what was 'reasonable' with regard to residential development in shoreline jurisdiction at the inception of the SMA, and the development of the existing residential structure on-site, has changed. Thus, strict application of the dimensional standards of the City's SMP and critical areas regulations preclude reasonable use of the property. The applicant therefore proposes use of current design and construction techniques in order to redevelop the existing residence to what would today be considered a reasonable use of the shoreline property.

4.4 LUC 20.25E.190.D.1.d

The hardship described in subsection D.1.c of this section is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size or natural features and the application of the SMP, and not, for example, deed restrictions or the applicant's own actions;

The hardship, as described above, is the inability to construct a reasonably sized residence consistent with current design standards on a shoreline property. This hardship stems from the following unique conditions and site parameters:

- The site includes natural features – a lake-fringe wetland and steep slope – with standard buffers/setbacks of 110 feet and 75 feet, respectively.
- The presence of the lake-fringe wetland, steep slope area, and their associated buffers/setbacks on the subject parcel eliminates any additional developable area on the subject property (the footprint of the existing vacant, outdated residential structure is not considered to be part of the buffer/setback).

It is the unique conditions described above combined with the strict application of the SMP (the inability to modify the standard wetland buffer to less than 110 feet without a shoreline variance) that results in the significant and burdensome elimination of additional developable area on-site that causes the hardship.

The elimination of additional developable area results from application of the standard wetland buffer provisions found in LUC 20.25H.095(D), and lacks a nexus with the claimed benefit of the regulation and the purpose of and intent of the SMA and the Bellevue SMP. The City's critical areas regulations, codified as Part 20.25H of the LUC, includes a critical areas report process for modification of the standard wetland buffer and setback. The applicant must demonstrate that the modifications to the critical area buffer and setback, combined with any restoration efforts, will result in equivalent or better protection of critical area functions and values than would result from adhering to the standard application of the regulations (LUC 20.25H.230). While the proposed project complies with the criteria for wetland buffer modification through this process, projects in shoreline jurisdiction are ineligible to utilize this process, which effectively eliminates additional developable area on-site beyond the footprint of the existing structure. Lake-fringe wetlands are common in areas where the shoreline has not been armored or otherwise modified. As such, the requirement for a shoreline variance to authorize modifications to the standard wetland buffer is at odds with the intent of the SMA and Bellevue SMP to allow single-family residential development as a preferred shoreline use.

The presence of a lake-fringe wetland along the shoreline of the subject property results from the fact that the shoreline has not been armored, as it has been on many neighboring parcels. It

is expected that these wetland features would have been extremely common along the shoreline prior to the widespread modification of the shoreline which has accompanied development of the shoreline over the past several decades. The lack of previous impacts on the shoreline of the subject property has created a situation where the project applicant now faces greater regulation on additional shoreline development than exists on neighboring parcels with greater existing shoreline impacts. Since the initial development of these areas, the SMA and associated local shoreline regulations have been developed to simultaneously allow for the development of the shoreline with preferred uses, including single-family residential development, while ensuring no net loss of ecological function of the shoreline. The project fully complies with the City's SMP regulations for redevelopment along the shoreline, as well as with the City's critical areas report process for deviating from standard application of critical areas regulations, in order to allow for additional development within the standard wetland buffer. This approach is consistent with the intent of the SMA and Bellevue SMP to allow single-family residential development while ensuring no net loss of shoreline functions and values.

In sum, the hardship - the inability to redevelop a reasonably-sized and -located residence on a shoreline property – is caused by unique natural features on the subject parcel combined with the strict application of the SMP [LUC 20.25E)]. This hardship does not stem from actions of the applicant or previous owners of the parcel.

4.5 LUC 20.25E.190.D.1.e

The design of the project is compatible with other authorized uses within the area and with uses planned for the area under the Bellevue Comprehensive Plan and SMP and will not cause adverse impacts to the shoreline environment;

Compliance with this criterion has been broken down into three separate sections: 4.5.1) compatibility with authorized developments within the area; 4.5.2) compatibility with uses planned for the area under the comprehensive plan and shoreline master program; and 4.5.3) will not cause adverse impacts to the shoreline environment.

4.5.1 Compatibility with Authorized Developments

The proposed shoreline variance includes the redevelopment of a single-family residence and associated hardscapes. The proposed structure will be located outside of the reduced shoreline setback in accordance with the City's SMP, as well as front and interior setbacks. The total proposed impact area for the property is 6,668 square feet.

The subject parcel is designated as Shoreline Residential under the Bellevue SMP (LUC 20.25E). Neighboring parcels along the shoreline of Lake Sammamish are similar in size and shape to the subject parcel, with the exception of parcels created through subdivision.

For the purposes of determining compatibility with authorized uses, the 'area' analyzed was determined based primarily upon size of parcels. The grouping includes 13 parcels extending southwest of the subject parcel, and 17 parcels extending northeast of the subject parcel.

The rationale for the parcel assessment was based upon prior guidance from Ecology (2016 personal communication with Joe Burcar, Shoreline Planner). In general, Ecology has indicated that a variance should be considered on a case-by-case basis, with emphasis placed upon existing development in the immediate vicinity of the subject parcel. This is further clarified in language from multiple SHB cases, including the following:

- Garrett v. Ecology, SHB No. 03-031, 03-032 (2005) (emphasis added):

  The determination of whether strict application of a shoreline plan precludes or interferes with "reasonable use" of property is always a fact-specific inquiry that examines a number of factors. The Board will look at the uses of ***adjacent and nearby lots****, the reasonable expectations of the owners, and the unique attributes of the lot.*

- Jefferson County v. Seattle Yacht Club, 73 Wn. App. 576 (1994) (emphasis added):

  "When considering whether a proposal is consistent with surrounding land uses, it is more appropriate to look at ***immediately adjacent properties*** *rather than focus on a larger area."*

As evidenced above, the SHB has placed an emphasis on the area immediately surrounding the subject parcel. Thus, the analysis has focused on the 30 immediately adjacent and nearby parcels that are both similar in size and depth, include portions of the same contiguous steep slope critical area on the western portion of the parcels, and are generally similarly developed with single-family residences along the shoreline of Lake Sammamish. The subject parcel currently contains an outdated and vacant single-family residential structure and appurtenant structures. Table 1 below provides a detailed breakdown of various information for these parcels. Numbered parcels in the table correspond with those shown in Figure 1.

Table 1. Assessment of Neighboring Development

Parcel	Primary Residence Constructed[1]	Parcel area (sf)[2]	Total impact area (sf)[3]	Total impact area (%)	Shoreline setback (ft)[4]
1	1967	15,148	5,301	35	21
2	1974	22,774	8,271	36.3	6
3	1977	16,887	5,076	30.1	18
4	2006	16,239	5,105	31.4	22
5	2003	13,504	3,966	29.4	39
6	2002	13,565	3,511	25.9	23
7 & 8[5]	1941	14,091	3,605	25.6	26
9	1979	30,589	7,811	25.5	40
10	1942	15,546	3,435	22.1	44
11	1999	15,768	5,136	32.6	49
12	2000	16,270	4,410	27.1	42
13	1985	16,013	5,317	33.2	32
14	**N/A**	**32,580**	**6,668**	**20.4**	**25**
15	1987	15,743	4,441	28.2	16
16 & 17[5]	1973 & 1967	15,599	7,398	47.4	0
18	1966	16,062	3,398	21.2	7
19	1967	16,209	3,582	22.1	19
20, 21, & 22[5]	2000, 1995, & 1945	34,843	9,527	27.3	22
23 & 24[5]	1942	17,276	3,062	17.7	24
25, 26, & 27[5]	2016, 2013, & 2015	38,096	14,551	38.2	24
28	1950	19,963	3,899	19.5	43
29	1998	19,560	4,532	23.2	26
30 & 31[5]	1993 & 1978	29,721	9,312	31.3	30
AVERAGE[6]	-	19,521	5,666	28.7	26

[1] Dates are from King County Department of Assessments.
[2] According to the project surveyor, the subject parcel is 32,580 square feet in size. Square footages for the remainder of the parcels are taken from the King County Department of Assessments. Parcel lines generally terminate at or near the OHWM for all parcels in the area of analysis.
[3] Impact areas were measured from aerial photos on the County's iMap website and include all visible structures, driveways, decks, lawn areas, and other improved surfaces. NE Rosemont Place has been excluded.
[4] Measured from the approximated OHWM on aerial photos on the County's iMap website.
[5] Although these parcels have been subdivided, they are combined for the purposes of this analysis to retain similarity with other parcels.
[6] Excludes subject parcel (#14).

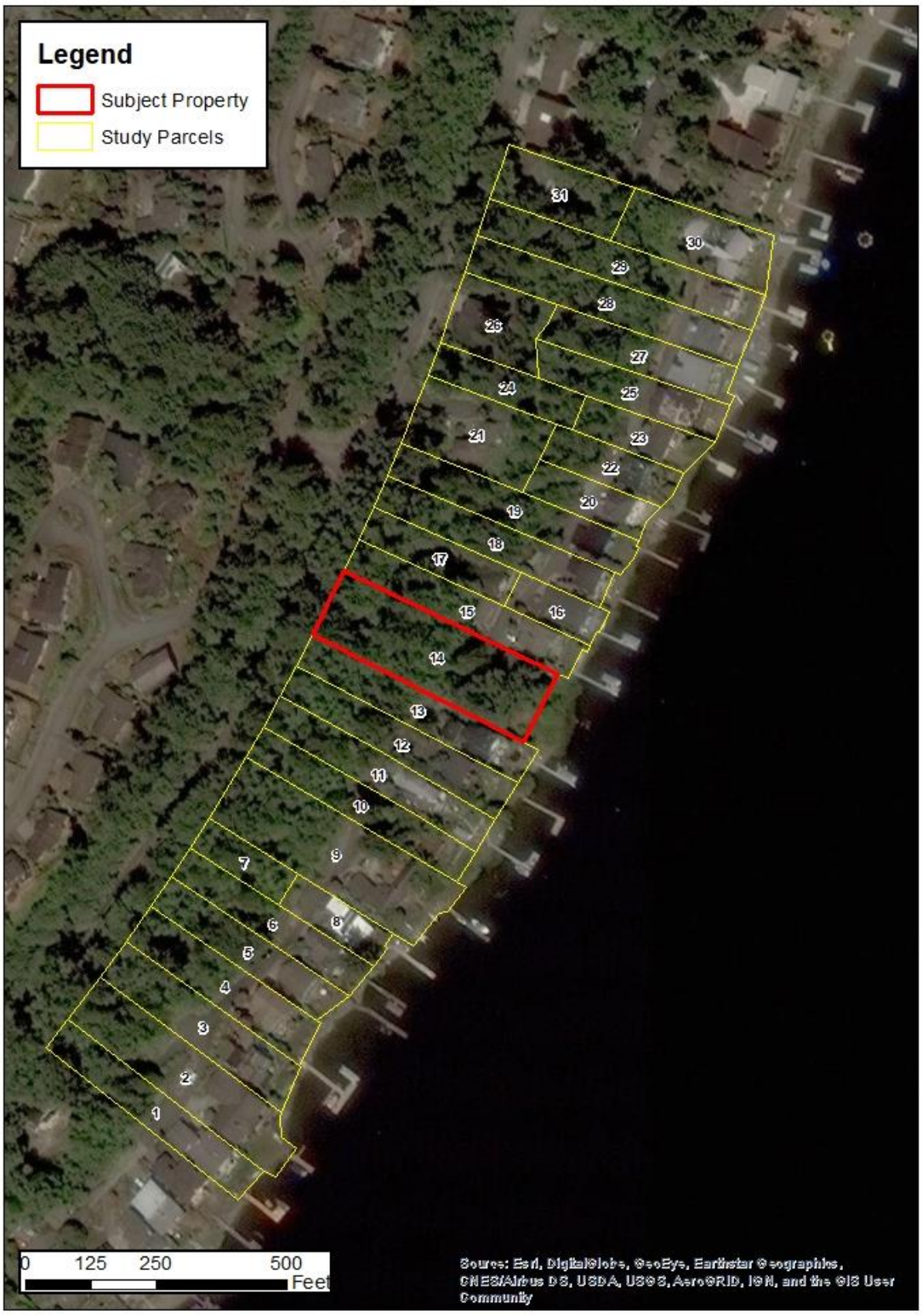


Figure 1. Neighboring parcels in the Shoreline Residential environment.

As seen in Table 1 above, the proposed single-family residential development is comparable to the development seen on neighboring parcels. While the 'total impact area' (6,668 square feet) is slightly higher than the average for the remainder of the parcels analyzed, it is similar in size to many neighboring properties. Additionally, the total percentage of the parcel impacted (20.4 percent) is substantially less than the average for the remainder of the parcels analyzed (28.7 percent). Also, of note, the 'total impact area' for all assessed parcels does not include areas of non-native vegetation. Thus, for many of the adjacent parcels, areas outside of the 'total impact area' include non-native and invasive vegetation rather than native vegetation more indicative of a natural shoreline buffer condition. The subject parcel will include substantial restoration of degraded areas, including removal of existing invasive species. This will result in a more natural condition. In addition, it appears that the majority of shoreline parcels analyzed include concrete bulkheads or similar hardened shoreline armoring, something not quantified in the analysis above. The proposed reduced setback of 25 feet is similar to neighboring parcels and is also compatible with adjacent development. The average setback of the other parcels analyzed is 26 feet, while the majority of setbacks analyzed (12 out of 22) are actually less than the proposed reduced setback. On the subject parcel, the proposed setback is reduced to 25 feet, consistent with the City's current minimum shoreline setback standards and will provide adequate mitigation for improved shoreline and buffer functions, as compared to the average adjacent parcel.

4.5.2 Compatibility with Planned Uses

The City's zoning code, comprehensive plan, and SMP all anticipate development of this parcel, with single-family residential development recognized as a suitable use. The parcel is currently developed with an outdated single-family residence and appurtenant structures.

The subject parcel is zoned Single-Family Residential (R-2.5) and has a comprehensive plan land use designation of Single Family Residential – Medium Density. Neighboring parcels in the vicinity of the subject property along the Lake Sammamish shoreline are likewise zoned and designated. These designations envision up to 3.5 dwelling units per acre.

The R-2.5 zone has a minimum lot area of 13,500 square feet, with a maximum lot coverage of 45 percent and a maximum building coverage of 35 percent (LUC 20.20.010). The proposed project is consistent with these dimensional criteria.

The subject parcel is designated Shoreline Residential under the City's SMP. The SMP includes the following description of the Shoreline Residential environment:

Purpose: *The purpose of the Shoreline Residential environment designation is to accommodate single or multifamily residential development and appurtenant structures that are consistent with the Bellevue SMP. An additional purpose is to provide appropriate public access and recreational uses.*

Designation Criteria: *A Shoreline Residential environment designation is assigned to Bellevue shorelands which are predominantly characterized by residential development or are planned for residential development and exhibit moderate to low levels of ecological functions because of historic shoreline modification activities.*

Per policy SH-9 of the SMP, residential uses are preferred uses in the Shoreline Residential environment. This is consistent with the SMA, which designates single-family residential development as a priority use in shoreline jurisdiction generally (RCW 90.58.020).

Policy SH-9: *Recognize residential development, appurtenant structures, and water-dependent and water-enjoyment recreation activities as preferred where they are appropriate and can be developed without significant impact to ecological functions identified in the Shoreline Analysis Report or displacement of water dependent uses.*

As described above, single-family residential development is a priority use of the shoreline under local and state regulations. The project will not interfere with public use of the shoreline. The existing dock is completely undersized and dilapidated and no longer includes any decking. Thus, the development of a new dock is expected to improve use of the shoreline. The project includes extensive mitigation plantings in compliance with shoreline setback reduction standards, as well wetland buffer mitigation standards. The project also includes the partial elimination of an existing retaining wall which currently disrupts the natural shoreline gradient. These efforts are designed to improve ecological function of the shoreline. Please see Section 4.2 of this report for a further discussion of the project's effect on the public interest.

4.5.3 Adverse Impacts

Existing ecological functions at the site, including those functions specific to the shoreline environment, are described in detail in Section 2. Overall, hydrologic, habitat, vegetative, and slope stability functions will be maintained or improved as a result of the proposed project.

The proposed shoreline variance to allow for modification of the standard wetland buffer will not cause adverse impacts to the shoreline environment; on the contrary, the proposal exceeds minimum shoreline and wetland buffer protection standards and includes restoration of portions of the degraded wetland buffer, steep slope setback, and shoreline setback/SVCA. Additionally, portions of the existing retaining wall will be removed, while portions will be replaced with stone stairs and wall sections, increasing the area of natural gradient from the shoreline of Lake Sammamish.

The proposed mitigation plan seeks to enhance a total of 4,794 SF of the site through invasive species removal and the planting of native trees, shrubs, and groundcover plants within the wetland buffer and steep slope setback. Net impacts to the wetland buffer total 3,251 SF. A total of 4,069 SF of mitigation planting is proposed within the wetland buffer. A portion of this total

area (455 SF) serves as mitigation for the proposed overwater impacts to Lake Sammamish. As such, the remaining 3,614 SF of mitigation area within the wetland buffer serves to compensate for 3,251 SF of new impacts to the wetland buffer, exceeding the required mitigation ratio of one-to-one.

New native plantings will have deeper root systems than the current areas of ornamental landscaping, lawn, and bare ground, reducing erosion potential and increasing soil stability. Additional rigid vegetation on-site will slow surface water flowing toward the wetland and shoreline. Overall, the quantity of available habitat will be decreased and the quality of retained habitat will be increased by replacing lawn, bare ground, invasive species, and ornamental landscaping with a dense and diverse native plant assemblage appropriate to the eco-region and growing conditions on-site. New plantings will provide food, cover, and nesting opportunities for wildlife.

As described above, hydrologic, habitat, and vegetative functions will be improved as a result of the proposed project. Thus, there will be no net loss of shoreline ecological functions over the existing condition and, as new vegetation matures over time the project will result in a net gain in shoreline ecological functions. Therefore, no adverse impacts to the shoreline environment will result from the proposed project.

4.6 LUC 20.25E.190.D.1.f

The variance does not constitute a grant of special privilege not enjoyed by other properties in the area and is the minimum necessary to afford relief; and

The subject parcel is located within an area along the shoreline of Lake Sammamish designated as Shoreline Residential under the City's SMP. Adjacent parcels within the immediate vicinity (those summarized in Table 1) are similarly designated. As shown in Table 1, the average impact area, as a percentage of lot size, is 28.7 percent. The proposed redevelopment, which includes expanding the existing residential footprint on the subject parcel, includes a total impact area of 20.4 percent, substantially less than the average for those analyzed in Section 4.5.1.

Additionally, it is expected that lake-fringe wetlands would have been extremely prevalent along the shoreline of Lake Sammamish prior to the development of the shoreline with single-family residences and associated shoreline armoring. These wetland features are still expected to be a common occurrence in areas lacking shoreline armoring. As such, many shoreline parcels along Lake Sammamish are likely encumbered by similar regulatory buffers/setbacks and limitations on future development. Outside of shoreline jurisdiction, modifications to the standard wetland buffers may be authorized through a critical areas report process, which

requires applicants to demonstrate that the modifications to the critical area, buffer, and setback, combined with any restoration efforts, will result in equivalent or better protection of critical area functions and values than would result from adhering to the standard application of the regulations (LUC 20.25H.230). Within shoreline jurisdiction, the critical areas report process cannot be used to authorize modifications to the standard wetland buffer, so similar parcels along the shoreline are expected to face similar regulatory challenges in the development or redevelopment of reasonably-sized and -located single-family residences.

The proposed redevelopment project satisfies the criteria of both the critical areas report process typically used in the City of Bellevue to allow for the modification of standard wetland buffer provisions, as well as the City's SMP criteria for development within the standard shoreline setback/SVCA. Adequate mitigation planting is proposed in order to ensure that the modification is in alignment with the intent of the City's critical areas regulations and SMP provisions, and ensures no net loss of shoreline or critical area ecological functions.

As previously mentioned, the entirety of the subject property is encumbered by critical areas and associated buffers/setbacks, and the shoreline setback/SVCA. Therefore, in order to redevelop the site with a new modern residence and dock structure that is consistent with the scale and character of existing homes in the vicinity, full avoidance of impacts is not possible. As such, minimization techniques were utilized during the design process in order to limit impacts and ensure that the proposed variance is the minimum necessary to provide relief from the hardship of preclusion from the redevelopment of a reasonably-sized and -located residence along the shoreline. Design of the proposed residence utilizes the full extent of the existing residential footprint, while the driveway is relocated and represents a reduction of 412 SF in impervious surface area relative to the existing driveway. Expanded areas of the proposed single-family residence are to be constructed in an area partially comprised of low functioning lawn/bare ground/non-native vegetation. All existing sheds and outbuildings, all of which are located within the wetland buffer and one of which is also located within the shoreline setback/SVCA, will be removed. The proposed pier deck will be fully grated. Invasive species will be removed throughout the site and native plantings will comprise the entirety of the site's landscape plan. Portions of the existing retaining wall will be removed, while portions will be replaced with stone stairs and wall sections, increasing the area of natural gradient from the shoreline of Lake Sammamish.

If additional development within the wetland buffer is approved for the subject parcel, this allowance would presumably be expected to be authorized for other properties in the areas as well. Under such a scenario, more areas of the shoreline could be developed with appropriate shoreline uses and restored with native plantings and other mitigation measures, resulting in improved shoreline ecological function. Based upon these factors, the applicant will not be

given a special privilege not enjoyed by other existing developed properties in the area, or privileges that would not be afforded to the redevelopment of parcels in the area.

5 LUC 20.25E.190.D.2

Consideration of Cumulative Impacts. In the granting of all variance approvals, the City shall also consider the cumulative impacts of additional requests for like actions in the area. For example, if variance approvals were granted for other development and/or uses in the area where similar circumstances exist, the total of the variance approvals shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

5.1 Assessment of Adverse Effects to the Shoreline Environment

A consideration of potential cumulative impacts involves an assessment of how similar requests, if granted to other properties within the vicinity, would result in impacts to the shoreline environment. Relevant to the subject parcel and surrounding area, such an assessment should consider the size of the proposed impact relative to the size of the parcel, along with the proximity of the development to the shoreline and its effect on wetlands and buffers along the lakeshore. These three items are discussed in detail below.

5.1.1 Size Comparison

As described previously, the proposed project involves construction of a new residence within a wetland buffer along Lake Sammamish. No undeveloped parcels exist within the area assessed in Section 4.5.1 above. Thus, like actions in the area would all involve some form of redevelopment. Similarly, lake-fringe wetlands are a common feature along lake shorelines, particularly in areas that have not been previously degraded or modified through shoreline armoring. As described in previous sections and as detailed in Table 1, the average percentage of the total lot impacted for parcels in the area is 28.7 percent. The proposed impact area for the subject parcel is 20.4 percent. Thus, like actions on other parcels in the area are likely to represent a substantially smaller proportion of lot impact area than the average impact area for the neighboring parcels assessed.

5.1.2 Proximity to the Shoreline

As described in previous sections and as detailed in Table 1, the average shoreline setback for parcels in the area is 26 feet. The proposed shoreline setback for the subject parcel is 25 feet, meeting the criteria of LUC 20.25E.065(F) for reduction of the standard shoreline setback and mitigating for impacts within the SVCA. While the full extent of the footprint of the existing single-family residence is utilized for the proposed redevelopment, options for expansion

westward (further landward) are limited due to the presence of NE Rosemont Place and the steep slope area. As such, expansion is proposed to the south and east (waterward) in accordance with shoreline setback/SVCA regulations. Redevelopment of similar parcels in the area, with structures currently built within the standard 50-foot shoreline setback, would also be required to comply with the City's criteria for the allowance of a setback reduction, if further impacts within the standard shoreline setback are proposed. Thus, like actions on other parcels in the area would likely involve either a maintenance of the existing shoreline setback or a decrease in shoreline setback with associated mitigation measures to ensure no net loss of shoreline function.

5.1.3 Effect on the Wetland Buffer

Impacts that result from collective changes over the landscape have the potential to affect habitat over time. The area within the vicinity of the project site is almost entirely developed with single-family residences. No undeveloped parcels exist within the area assessed in Section 4.5.1 above. While some development or re-development can be expected, the overall character of the urban setting in not likely to change substantially. Developed parcels in the area generally include structures near the shoreline, at the toe of the steep slope area. Additionally, many of the neighboring parcels have armored shorelines, which essentially preclude the ability of lake-fringe wetlands to establish. It is expected that lake-fringe wetlands would have been prevalent along the shoreline prior to the introduction of shoreline armoring, and properties without armoring currently are likely to contain these features. As such, while it is likely that existing development has resulted in the elimination of many lake-fringe wetlands, shoreline parcels lacking shoreline armoring are likely to be encumbered by regulatory wetland buffers.

As described previously, the proposed project involves redevelopment of an existing residence within a wetland buffer. In general, residential neighborhoods, and other urban areas, do trend toward less mature native vegetation and more ornamental vegetation and impervious surface. The proposed project is consistent with this trend in that some vegetated areas will be replaced with development and increased impervious surface. However, the functions of retained habitat within the wetland buffer will be improved, not further degraded, once proposed mitigation activities are considered.

In the event that nearby land is developed in a manner similar to what is proposed for this project, anticipated changes to wetland buffer habitat in the landscape may include a reduction in habitat quantity, increased habitat fragmentation and disturbance, and improved quality of retained habitat areas. Overall, the cumulative impacts to urban wetland buffer habitat from relatively small development proposals like this one are expected to be minor. This is primarily due to the fact that the majority of the surrounding area has already been developed and is unlikely to substantially change in the foreseeable future. Additionally, similar proposals may

require restoration of degraded habitat areas (as does this one), in which case, wetland buffer functions would benefit.

5.2 Consistency with RCW 90.58.020

Consistency with RCW 90.58.020 is discussed in Section 4.1 of this compliance document.

6 Summary

Redevelopment is proposed on a property entirely encumbered by wetland and steep slope critical areas and associated buffers/setbacks, as well as a shoreline structure setback and SVCA. The existing residence on the parcel will be removed and replaced with a modern residence. The driveway and other paved areas on-site will be re-configured, and a new dock will be constructed. Proposed activities will result in new permanent impacts to critical areas, buffers, setbacks, as well as the shoreline structure setback and SVCA.

The proposed project is subject to a shoreline variance due to the presence of an on-site lake-fringe wetland buffer and the proposal to redevelop an expanded single-family residence within that area. The requirement for a shoreline variance stems from the need to modify the standard wetland buffer within shoreline jurisdiction to allow for the redevelopment of a reasonably-sized and -located residence. While the City's critical areas regulations include a standard procedure for such modifications, which the proposed project complies with, within shoreline jurisdiction such a modification requires a shoreline variance. The proposed project will comply with the City of Bellevue requirements for shoreline variance permits, as established in LUC 20.25E.190.

Impacts to the shoreline structure setback and SVCA will be fully compensated for through the installation of native plantings adjacent to the shoreline. This approach is consistent with the criteria of the City's shoreline master program and will result in no net loss of shoreline ecological functions.

As mitigation for proposed impacts to shoreline and critical area buffers and setbacks, a significant portion of the site will be enhanced with native vegetation. This approach follows the City's critical areas report process, as described within this document. The proposed planting plan complies with shoreline vegetation conservation regulations and results in better protection of critical area functions and values than would be provided by the standard application of the wetland and geologic hazard area regulations. No loss of shoreline or critical area ecological function is expected as a result of proposed actions. Overall a net gain in shoreline and critical area buffer/setback functions and values is proposed both on- and off-site.